THE

WESTERN JOURNAL

OF

MEDICINE AND SURGERY.

AUGUST, 1849.

ART. I.—*A Lecture on the Determinative Cause of Labor*, delivered to his Class, in Lebanon, Tenn., by F. H. GORDON, M. D.

The long and anxiously looked for "Theoretical and Practical Treatise on Human Parturition," by Professor Miller, has appeared at last. I have not yet had the pleasure of its perusal; but from the review of it in the Western Journal, I take it to be such a work as I expected from so clear a head, and such as will much interest and benefit the profession. I have notes taken some years ago from the able and lucid lectures of Professor M., which contain more important matter, than I ever saw in the same space. His arguments generally, and especially upon controverted points, were so clear and forcible, that he seldom failed to convince me of the truth of his positions.

But independence of thought will sometimes lead the mind to differ from the highest authority; and it is my lot to view differently from Prof. M. one important subject of his book; I mean "the determinative cause of labor." And I know he will fully appreciate the reasons I may advance against his position. He contends that the determinative cause of labor, is "irritation of the cervix and especially of the os uteri, arising from the contact of the ovum;" or, as I heard him briefly express it in a lecture, it is the "sensible impression of the fetus upon the cervix and os uteri."

The arguments in support of this position, are 1st. The unfolding of the neck of the womb so as to allow contact of the ovum, is deferred till a short time before labor sets in. 2d. The analogy of the urinary bladder and the rectum being excited to expulsive efforts, by the contact of their contents. 3d. The uterus can be excited to expulsive efforts at any time, by irritation of its orifice.

The first and third are statements of facts, which must be admitted; and the second position presents a striking analogy. But I think these facts and this analogy are but *presumptive* evidences of the truth of the position, and not conclusive proof. There is an adverse position supported, in my judgment, by evidences more conclusive. To be clearly understood let it be plainly stated.—The determinative cause of labor, is *an increase of vital force given to the womb at term.* I do not deny—nay, I believe it—that when the womb is fully supplied with sensibility and vital force for its task at term, contact of the ovum may call this force into action; but my position is, that in a healthy uterus, contact is not adequate to cause expulsive efforts during the course of gestation; because vitality is not so abundant as to give the organ the requisite excitability and power before term. True, the finger in the os uteri, or the hand grasping the womb,

or a fall, may lash the organ into fury at any stage; but this is violence or disease—not ordinary stimulus and ordinary excitability, or the uterus would not take on abnormal action.

Prof. M.'s first argument, that the neck of the uterus is not unfolded till a late period of pregnancy, is introduced to prove that this is Nature's provision against abortion, or premature delivery; and also her plan of bringing on labor at term, by then presenting a sensitive os uteri to the impression of the ovum. But abortions and premature labors do take place before term and before the neck is unfolded. Is labor now the effect of "sensible impression?" This is regarded as the result of disease or violence. So it is; but it proves 1st. That labor can exist without contact of the ovum with the unfolded neck; 2d. That moderate vitality of the womb may be called into powerful action by a powerful stimulus; and 3d. That morbid excitability of the organ may empower it to be excited into violent action by ordinary stimulus.

In first pregnancies, the neck unfolds more slowly than in subsequent ones, and yet in the first instance women are less apt to go to the full term of 40 weeks. I see no way to account for this unless by supposing that vitality is earlier supplied in the first instance.

Again. If the womb is, at all stages, possessed of the same amount of vitality, and labor is induced by contact of the fetus with the neck, we should expect all large children to be born before full term; because a large child might produce as much effect on a half unfolded neck, as a small one on a fully unfolded neck. But the first child is apt to be less than subsequent ones, and yet more apt to be born before full term.

From these considerations, it appears that "the office of the cervix uteri is (truly) to retain the ovum till the proper time arrives for its expulsion," and nothing more;

and that the determinative cause of labor includes something more than "sensible impression."

But, in support of the position we assume, we need but state as a law of the organization, that whatever an organ is required to do, it is qualified to perform, by being furnished with *an adequate supply of vital force, at the time the requisition is made:* and the converse, vital force is withheld from an organ when it is required to be inert. Need we adduce proof to establish this as a vital law? Its mere statement must demand the assent of most minds. But take a few of the multiplied facts which illustrate the law. From infancy to adult age, the assimilative organs are more highly vitalized, and therefore more active than the depurating organs; hence the infant grows to the stature of puberty. During the meridian of life, vitality is equally distributed to the assimilating and depurating organs, and therefore the individual is stationary in size. But in the decline of life, the depurative organs are more vigorous, and the being diminishes in stature to the end of life.

Various parts of the physical system undergo changes in obedience to the same law of vitalization. At one age, the infant teeth are developed; at another, the permanent teeth come out. The ovaria and mammary glands are rapidly vitalized at puberty. They are speedily developed, and take on exquisite sensibility. At this period, the external genitals are enlarged, and made more sensitive, while the mons veneris, from a new vital action, is soon covered with hair. During these changes the uterus is abundantly vitalized, and takes on the new function of menstruation, the common evidence of its being capable of another vital process, that of propagating the species. After conception, the vital fluid is still more abundantly furnished to all the organs about to develop and rear the new being. They all enlarge still more, become exquisitely sensitive, until, at term, the uterus has vital force

enough to expel the fetus into the world, and in a few days the mammary glands are so highly vitalized as to secrete an abundance of milk.

In the decline of life, the catamenia ceases, the ovaries, mammæ, and uterus become atrophied, and the procreative power ceases, because the vital force is withheld.

In the male, similar changes take place, in obedience to the same vital law.

Of the inferior animals, similar remarks may be made. The feathers of fowls, the comb and spurs of cocks, the fangs of serpents, the tusks of boars, and the horns of various animals, are all developed in their due stages of life, and without violating the law regulating the distribution of vital force, none of them could be developed before their due season.

We might pursue this view, and notice the various changes which take place, not only in other animals of a high grade, but in insects, and the vegetable kingdom.—All of these have their rounds of existence, and are furnished with vital force in their different organs *pari pasu* with the developments and functions which take place in them.

When the gravid uterus is viewed in relation to this law, and when it is seen that its ordinary course is not to make expulsive efforts till full term, we are compelled to infer, that the excitability and power requisite to expulsion are withheld until the end of gestation. It would be but waste of vital force, to supply the womb with more than its normal functions necessarily expend; and expulsive efforts before term, must be regarded as abnormal, and consequently without that abundant power usually supplied for parturition.

At any stage of gestation, give the uterus the amount of vital fluid which imparts exquisite sensibility and great

power, and you at once bring on labor from the presentation of the slightest stimulus.

Were Nature so careless and so prodigal of vital force, as to furnish it freely and equally from conception to the end of parturition, nothing but abortion and misrule could follow. A slight cause, as irritable bowels, an awkward step, vomiting, a jolt in a carriage, laughter, and thousands of little incidents, such as almost daily occur, could not fail to cause abortion. No fetus could mature, and the species would become extinct.

What limits the term of gestation, but the law governing the distribution of vital force? Is it not by this law, that Nature controls all the procreative functions, from the irruption to the decline of the catamenia? And if there is any uniform order, or time for their performance, does this not imply that vital force is furnished to each organ *when* it is required to act, and in an amount adequate to the task required? And the converse, the efficient vital force is withheld till "Nature's own good time," and therefore in the normal course of things, the act can not be accomplished before that time.

According to this view, the reason is plain, why the gravid uterus has its term of gestation—because the requisite sensibility and contractile force are withheld till term, and it is therefore impossible for labor to come on before that time, because the power is wanting. There is not the ability, and therefore the act cannot be done.—But if labor come on before term, it must be in violation of this law. Disease or violence may pervert the law and do mischief; and perversion is a pre-requisite to the mischief.

On the contrary, when gestation has completed its round, and fulfilled all its objects, and the fetus is completely viable without the mother, the womb becomes exquisitely sensitive, and it is now as impossible for it to refrain from expulsive efforts, as before it was impossible

for it to make them. Hence the infant is born, because the uterus has the power and can not avoid exerting it. The task is a great one, and the womb is now furnished with a large amount of vital force. The hand placed in the womb during its action, will satisfy any one of its extraordinary power.

I have already admitted that stimulus is an *exciting cause* of labor. That the contact of the ovum prompts the uterus to act, I think probable: but its presence could not call the organ into action, until furnished with (I may call it) the parturient vital fluid, which endows it with exquisite sensibility and great power. The tendency of an organ to act, and the power with which it is capable of acting, depend upon the sum of its vitality and the stimulus conjoined. But the stimulus (i. e. the fetus) is always present, from the beginning to the end of pregnancy; ergo, the parturient vitality is not furnished till term, because labor is not induced till then.

In further support of this position, it may be remarked that the uterus may be so highly vitalized, as to take on efficient parturient action without the presence of a fetus. This is evinced, when the organ is distended with some morbid product, as gas, hydatids, &c., or in cases of extra-uterine pregnancy. In these cases, it must be allowed, that the uterus takes on expulsive efforts at term, without "sensible impression."

And we may add, that if labor is effected, or altogether caused by the mechanical impression of the fetus, we must be compelled to ascribe the gradual expansion of the cervix uteri, in latter months, to a similar cause, that is, to the distention of the womb, caused by the growth of the fetus. But to this, we would urge the same objections we have before adduced. The neck is obliterated no sooner by large, than by small children. The expansion of the neck, must be in obedience to the same law, which protrudes the horns of quadrupeds, and accom-

plishes many other objects in their due course of time. But we might as justly ascribe the expansion of body of the womb to the fetus as that of the neck. And by the same parity of reason, we might account for the absolute growth of the uterus, from one or two ounces to three or four pounds. In truth, none of these are done by the fetus, but for it; just as delivery is not accomplished *by* the fetus, but *for* it. All the changes which take place in the mother, from conception to the end of lactation, are *for* the new being—that is, they are accomplished *by* the laws of organization, *for* the perpetuation of the species. The great Author of nature, has wisely not left the propagation of the races of beings to any contingency or important agency of the fetus; but he has established physical laws, by which the end is much more certainly accomplished.

Lebanon, Tenn., April, 1849.

Art. II.—*Three Cases of Puerperal Peritonitis.* Reported by L. M. Lawrence, M. D., of Nashville, Tenn., Resident Pupil at the Bellevue Hospital, New York.

Case. I.—M. W. aetat. 35 years, native of Ireland, was delivered at 10 o'clock, A. M., on the 21st of December, of her third child. The labor was natural and easy, lasting eight hours.

22nd, 8 A. M. Lochial discharge is going on well.—Pulse 110; mind uneasy; bowels not moved since delivery. Ordered ol. ricin. ℥ iss. which not being retained, gave magnes. sulphat. ℥ j.; operated well.

2 P. M. Has had a violent chill, followed by hot skin, profuse perspiration, and partial secretion of milk; pulse full, 140; occasional vomiting and delirium. Tenderness on pressure in right iliac region. Prescribed,

℞. Hydrarg. submur. gr. x.
Camphor, gr. v.
Pulv. opii, gr. j.
M.

The vomiting was relieved by the free use of ice.

6 P. M. Vomiting returned. Abdomen slightly tympanitic; tenderness in right iliac much increased; great mental uneasiness; pulse 130 and small. Bled her to approaching syncope; pulse fell to 120, and increased in volume.

9 P. M. Patient more tranquil; vomiting has ceased, but intense pain still produced by pressure. Calomel, camphor, etc. repeated; hop fomentation to abdomen.

23d, 9 A. M. Rested pretty well latter part of the night, and is more quiet than on yesterday; had one small alvine discharge; abdomen more tympanitic, and pain in the iliac region greater; pulse 130. Lochia have ceased. Ordered ol. ricin. ℥ j., which was rejected by the stomach; then gave of calomel gr. v., camphor gr. ij., pulv. opi. gr. ss. M.; to be repeated every two hours.

2 P. M. Pulse 120; general condition unimproved.—Directed six leeches to hypogastrium, to be followed by warm poultices. Cal., camph., etc. continued.

5 P. M. Bowels freely moved by an enema of oil and spts. turpentine. A blister 12 by 12 inches to abdomen, to be dressed with mercurial ointment.

24th, 9 A. M. Patient much worse; rested badly; pulse very frequent and feeble; constantly vomiting a greenish yellow matter.

Died at 3 P. M.

Autopsy.—Intestines distended with flatus. Peritoneum congested and inflamed in a high degree throughout its entire extent, most so in the right iliac region. A slight effusion of serum in the peritoneal cavity; neither lymph or pus to be anywhere detected. Uterus healthy,

save a slight inflammation of the veins. Other viscera unaltered.

Case II.—Josephine A——, aet. 22 years, native of Ireland, of intemperate habits, was delivered at 2 A. M. on the 22d of December, after an easy and natural labor, which lasted six hours, of her first child. The patient manifested great anxiety of mind, both during and after labor.

11 A. M. Doing well; being apprehensive of peritonitis I ordered a dose of oil, to be followed, at intervals of an hour, by a powder of calomel gr. v., camphor gr. ij., pulv. opii gr. j.

7 P. M. Bowels moved freely; lochia normal.

23d, 2 P. M. Had a slight chill, followed by high fever, perspiration and a slight secretion of milk. Powders continued, decreasing the dose one-half.

6 P. M. Tenderness on pressure in right iliac region. Pulse tense, 120. Sat patient up in bed, bled her to approaching syncope, taking about twenty ounces of blood. Pulse immediately fell to 110, and became fuller.

24th, 9 A. M. Patient rested well; had been troubled with slight vomiting, which readily yielded to the use of ice. Abdomen somewhat tympanitic; tenderness increased; lochial discharge less copious; face anxious; constant jactitation. Same treatment.

6 P. M. Tenderness and tympanitis augmented; tongue coated; pulse 130, and tense. Venesection to sixteen ounces was practiced, and under it the pulse became more natural.

25th, 9 A. M. Patient passed a tolerably quiet night. No alvine dejection; complains of still greater pain in the abdomen; occasionally vomits, and the lochia have been arrested. Directed an enema of oil and turpentine; bran fomentation to abdomen, and $\frac{1}{8}$ gr. morphia every hour.

6 P. M. Bowels moved; vomiting continues; matters

thrown up of a bilious character; skin cold, and wet with perspiration; pulse feeble and quick. Ordered brandy to be freely administered and hot bricks to be applied to feet.

26th, 9 A. M. Patient excessively prostrated, and still vomiting the greenish looking matter. Pulse barely perceptible; respiration labored.

Died at 3 P. M.

Autopsy.—On opening the cavity of the abdomen found an effusion of serum, lymph and pus; recent adhesions and the intestines distended with gas. The whole peritoneal sac was injected, presenting an arborescent appearance. The cavity of the uterus was of a dark gangrenous hue and fetid odor. The gall bladder was full. and there was an effusion of serum into the cavity of the pleura and pericardium.

Case III.—Elizabeth Riley, aged 35, native of Ireland, temperate and of good constiution, was delivered of her fourth child, January 30th, 8 P. M., the labor being easy. and lasting fourteen hours.

31st; Very comfortable. No motion from bowels since delivery. Gave castor oil, one and a half ounces, which operated four times.

Feb. 1st, 2 A. M. Complains of slight pain in the hypogastric region, and says she had a light chill the afternoon previous. The secretion of milk is small; lochial discharge free; pulse small and wiry, beating 140 a minute; besides she is hysterical. Sat patient up in bed and bled her to approaching syncope, taking about 30 ounces. during which the pulse fell to one hundred and became full and more natural. Ordered one grain of calomel and half a grain of opium every hour.

9 A. M. Feels better; rested pretty well after bleeding. previous to which she had slept but little. The pain in the hypogastric region is not so intense; skin dry and tongue coated white; pulse one hundred and twenty and

small. Gave her ten grains of calomel, with five of camphor, and one of opium. Ordered an injection of one ounce of assafetida, and one grain of calomel, with one of opium every hour. Also ordered a turpentine strap to abdomen.

8 P. M. Says she feels much better; has had a comfortable sleep of two hours duration; skin moist; pulse one hundred and fifteen, and full; some distention and tenderness of abdomen. Ate a little gruel during the day. Continue last prescription.

12 o'clock. Sleeping soundly; respiration twenty in a minute, and laborious; pulse full; has had four dark colored alvine dejections.

Feb. 2d, 9 A. M. Slept comfortably most of the night, and feels pleasantly to-day. But little pain over abdomen on pressure; lochia flowing well; pulse one hundred and eighteen, and full; had one dark colored discharge; complains of thirst; tongue in better condition. Ordered pil. calomel comp. and opium, of each a grain, every hour.

2 P. M. Pretty easy; no pain in abdomen; pulse one hundred and twenty in a minute, not so full; appetite good.

At 12 o'clock she is comfortable.

3d, 9 A. M. Slept most the night; pulse one hundred; appetite good. Continue same treatment.

2 P. M. Improving. Continue same prescription, with half the quantity of opium.

In the evening she is feeling pretty well; appetite tolerably good, and has had one natural discharge from her bowels.

4th. Rested badly last night; bowels moved six or eight times, and she feels very weak. Ordered brandy punch, and to continue calomel and opium every two hours.

5th. Rested badly, and had two discharges from bow-

els. Has a cough which causes pain in the abdomen.—Ordered to stop last prescription.

6th. Very weak, and bowels opened once since last date. Found a mucous rattle over both lungs; feeble respiration and crepitous at the base of right lung; pulse one hundred and thirty, and small; tongue coated; has no pain. Ordered calomel gr. j. and opium half a grain, every two hours. Also mist. expector. and vin. antimony.

7th; Feels pretty smart, though she rested badly; cough is easier, and bowels have moved twice this morning.

This evening she has no pain anywhere, but is quite weak, having had four alvine evacuations and vomited several times. Ordered weak brandy punch.

8th. Bowels moved twice last night, and she slept but little. Pulse continues frequent and pretty strong. Suspended medication and ordered nourishing diet.

9th. Bowels still loose. Feels no pain; expectorates none; the mucous rattle is audible several feet from the bed. Ordered an enema of tr. opii ℥ j. and starch q. s., which is to be repeated after every second discharge.

10th. Slept but little last night. Bowels were twice moved; tongue somewhat enlarged and purple. She vomits a greenish matter whenever the pain is severe; pulse one hundred and thirty, and full; mucous rattle as before. Ordered tart. antimony, the eighth part of a grain every two hours.

At 8 o'clock, P. M., saw her again. Has expectorated a little mucous tinged with blood; breathing is difficult and pulse feeble; heard a mucous rattle in left lung and the apex of right, with bronchial respiration in inferior two-thirds of right lung. Ordered aqua camphor. ℥ iv., ammonia carb. ℈j., of which a tablespoonful every hour; sinapisms to chest.

This woman died early on the morning of the 11th.

Autopsical appearances.—The abdomen was filled with pus; and the pus was gathered, also, in sacs, formed by lymph, in the convolutions of the intestines. The bowels were strongly agglutinated together. There was no effusion of serum, at least it was not discoverable. The uterus was healthy. There was effusion of serum into the pleural cavity; bronchitis in both lungs, and pneumonia in the inferior portion of the right lung.

It is remarkable in this case that the pain in the abdomen ceased some days before death.

Before closing this report, I trust I may be allowed a few words respecting the Hospital and our efficient head, Dr. Reese. He has proved himself highly fitted for the post he now occupies—a man filled with the desire to benefit the patients and the profession. Under his fostering care, the Hospital has come to be one of the first institutions of the kind in this country, instead, as it formerly was, a shame to this great city.

Bellevue Hospital, June, 1849.

Art. III.—*A Case of Nephritis.—Lumbo-renal Abscess.—Death.—Post-Mortem Examination.* By Dr. E. B. Haskins, of Clarksville, Tenn.

Mr. J—— S——, apothecary, aet. 25, of small stature, and delicate habit, was attacked early in the month of August, 1848, with slight uneasiness in the right side, causing him to bend his body in that direction. In a few days he was seized, after taking a cold bath, with fever, attended with considerable increase of the local uneasiness. I was called to him on the 19th of August. He then had full pulse, beating 110 times in a minute, anorexia and foul tongue; decubitus, mostly on right side; pain and tenderness on pressure immediately over the right kidney; pain and retraction of right testicle; fre-

quent desire to urinate; urine normal in appearance and quantity.

The seat of the pain and tenderness, together with the pain and retraction of the testicle, and the frequent desire to micturate, all pointed to the kidney as the suffering organ; whilst the absence in the urine of albumen and other products of disordered secretion, indicated with certainly equal probability that the inflammation did not involve the proper glandular structure of the kidney, but rather the investing tunic or capsule of that organ, together with the cellular structure, and possibly the muscles upon which the organ rests, constituting the *perinephritis* of M. Rayer.

The treatment was actively antiphlogistic; embracing cups to the loins, purgatives and nauseants; to which was added colchicum, under the belief that the disease might be of a rheumatic character. About this time the urine was carefully analyzed without anything abnormal being detected.

The disease continued acute for about six weeks, towards the latter portion of which time, the active antiphlogistic treatment was abandoned for mercury in alterative doses, with tinct. of iodine freely applied with a shaving brush, over the region of tenderness and pain.

When the acute symptoms had fairly subsided, the urine, on being allowed to stand, precipitated considerable quantities of uric acid, and the urates of soda and ammonia, There appeared, coetaneously with this, a free warm diaphoresis, which, while it appeared likely to effect a change favorable to the patient, strengthened the supposition of the rheumatic character of the inflammation.

The length of time that elapsed before suppuration occurred, together with the pathological condition of the heart, as revealed at the necroscopy, also give countenance to this element of the diagnosis.

The amendment, however, was only partial. The tongue assumed a more healthy appearance, the appetite slightly improved, and the pulse lessened in frequency and force. The sub-acute fever still continued, with the red and fawn colored amorphous deposites in the urine.

This condition of things continued for two weeks when slight rigors came on, followed by high fever, presenting more or less regular diurnal paroxysms. The urine again assuming a healthy appearance, tonics, with light nutritious diet, were ordered, to sustain the system under what was thought to be purulent formation. The local treatment consisted in the use of camphorated mercurial ointment, ointment of iodine, and, occasionally, the application of warm poultices, over the seat of pain and tenderness.

The condition of the patient and the main features of the treatment were materially the same up to the middle of December, when he passed out of my hands, at which time he was able (as, indeed, he had been ever since the decline of the acute stage,) to sit up in bed, walk about the room, and, in good weather, even to take exercise in a carriage.

I saw the patient no more, professionally, until the last of February, when I met, in consultation upon his case, Drs. Wilcox, Cooper, Donoho, and Finley.

We learned from the then attending physician (Dr. W.) that the treatment had consisted mainly in an active course of mercury ; that salivation was induced ; that the patient improved for a time, but had grown worse from imprudence, as was thought, in over-exercise.

The condition of the patient at this time was as follows : Considerable emaciation, with an anemic aspect of body ; yellow skin ; face tumid ; pulse 120 ; stomach and bowels irritable ; but little appetite ; thirst ; tumefaction, with some tenderness over right kidney.

The physical signs were : Chest resonant on percus-

sion; respiratory murmur feeble but somewhat rude; a bellows-murmur (of anemia?) heard on the first sound of the heart.

The treatment agreed upon consisted of tonics, with light animal diet, &c., but proved of no avail. The patient gradually sunk and finally died on the 12th of March, 1849.

Autopsy, twelve hours after death.—Body emaciated; skin of a pale yellowish hue; on right side, crest of ilium overlapped the false ribs. Thorax—on the left side of the mediastinum, about sixteen ounces of a dark yellowish serosity, that gave, with nitric acid, the characteristic reaction of bile,* occupied the posterior portion of the chest; feeble, but extensive adhesions between the costal and pulmonary pleuras of the right side, as well as adhesions of the lobes of the right lung. The apices of both lungs were marbled by a considerable deposit of melanotic matter. The lining membrane of the larger bronchial tubes was red, and covered with a viscid mucus. The pericardium contained three or four ounces of a fluid that escaped without examination; the cardiac texture softened, the fingers piercing the walls of the heart with great ease.† Abdomen—Liver slightly enlarged, but texture healthy in appearance. Gall-bladder distended with dark thick bile, and contained four gall-stones of the size of a grain of coffee; spleen greatly enlarged. The mucous coats of the stomach and bowels healthy, as far as examined. Mesenteric glands normal. The left kidney

* From this fact, we would presume that the jaundiced hue of the skin depended in this case upon an excess of *biliphæin*, and not that of *hæmaphæin*, as supposed by Golding Bird to be the case, in the yellow skin of chlorotic and anemic subjects, generally.

† No symptom drew special attention to this organ; and, therefore, it was not examined until late in the disease;—yet it is quite probable that pericarditis supervened in the course of the malady.

was sound; right kidney enlarged, but presented no decided marks of alteration of structure, except considerable thickening of the investing capsule. Between the right kidney and upper portion of the psoas magnus and quadratus lumborum muscles, embracing the posterior face of the investing tunic of the kidney, the adipose tissue beneath, and the anterior face of the muscles above named, an abscess, lined by a dense cyst, was found, containing about ten ounces of a whitish curdy-looking pus. The circumference of the abscess corresponded exactly with that of the kidney.

Clarksville, Tenn., July 3, 1849.

ART. IV.—*Report of Cases.* By B. I. RAPHAEL, M. D., one of the Attending Surgeons to the Louisville Marine Hospital.

The singular autopsic appearances of the following cases have induced me to submit them to the profession.

Case 1. *Unique Malformation of an Infant—Autopsy.*—The subject under consideration, was a full sized, healthy looking infant, which at birth presented the following appearances: At the umbilical region there was a tumor about the size of a hen's egg, containing intestine. This could be easily reduced, but would return again as soon as the pressure was removed. There was a slight attempt at the formation of a penis and scrotum, but the testes had not descended; the anus was imperforate, and the posterior fontanelle wanting. The child lived nine days.

Post Mortem Examination.—The tumor situated at the umbilical region, contained nearly the whole mass of intestines, which were adherent to a considerable extent.

The entire colon was wanting. The extremity of the small intestines terminated in this umbilical sac, and meconium passed through an opening which had been made by ulceration. The left kidney was situated in its proper place, but the right one was found in the right hypogastric region. Both ureters terminated in the sac containing the intestines, and no trace of a bladder could be found. The sacrum, which was very broad, filled up the space between the rami of the ischium, and as the pubis was wanting, the coccyx, with the ascending rami of the ischium, formed the anterior part of the pelvis. The other organs appeared to be in their proper position.

Case 2. *Incised Wound of the Abdomen—Death—Autopsy.*—Joseph Smith, negro, aet. 26, waiter, about an hour before I saw him, received two incised wounds in the abdomen, one on each side of the median line. The one on the right side was half way between the umbilicus and pubis, and one inch external to the median line. The one on the left was on a line with the umbilicus, just over the point of the eleventh rib. Both of these wounds were transverse, and about half an inch in length, and had penetrated into the cavity of the abdomen. A small portion of omentum protruded through the wound on the left side. There was also a contusion of the nose and the left eye, and the patient was in a state of intoxication; he complained of great pain in his bladder, and was soon after seized with vomiting. A catheter was introduced into his bladder, but no water came away. The wounds were dressed—the one on the left side with a suture and adhesive strap; the one on the right side with straps alone. Soon after this he fell asleep.

April 10th. Patient evinces symptoms of peritonitis: his pulse was small and tense, and he complained of great pain over the whole abdominal region, but more especially near the wound on the right side; a whitish fluid, ting-

ed with blood, flowed freely through this wound when slight pressure was made on the abdomen. Three other wounds were also discovered: one situated near the coracoid process of the left scapula, the others on the left side of his back—the superior one corresponding to the external edge of the scapula near its middle; the inferior one between the tenth and eleventh ribs four inches from the spine. The edges of these wounds were drawn together by adhesive straps. Vs. ℥ xij. and a simple injection given. Twelve leeches were also applied to the abdomen, and the bleeding to be kept up, with hot fomentations. These means, however, proved unavailing; the patient continued to sink during the day, and died at 9½ o'clock, P. M.

Autopsy, twelve hours after death.—When the abdomen was opened, the wound on the anterior part of the body, over the eleventh rib, was found to be larger internally than externally—that on the tegumentary surface being about half an inch in length; that on the peritoneal surface one and a half inches. The one on the right side was about in the same state, and had reached the jejunum about its middle. The wound of the jejunum was a transverse one, about three-fourths of an inch in length, with everted and gaping edges. A considerable quantity of feculant matter had made its way into the cavity of the abdomen through this opening. The cavity of the thorax on the left side, contained about ℥vi. of effused blood. The organs, generally, were healthy. The wound over the coracoid process of the scapula passed obliquely downwards, backwards, and outwards, almost to the shoulder joint, just escaping the axillary artery and brachial plexus of nerves. The superior wound on the back passed about an inch and a half downwards, forwards, and inwards, into the substance of the infra spinatus muscle. The wound between the tenth and eleventh ribs passed downwards through the lung about one inch and a half

from its base, through the diaphragm and into the substance of the spleen, a small portion of the tenth rib having been broken off by the blow.

Case 3. *Incised Wound of the Diaphragm and Stomach.*—I was called, November 7th, 1848, about 7 o'clock, to see Henry Bremaker, a lad, aged 19, who was wounded in a fight, about ten minutes previous; found him lying in the barroom of a coffee house, and on examination discovered a wound about one inch in extent, through which a small portion of omentum protruded, situated on the left side, between the eighth and ninth ribs, and about midway between the sternal and vertebral articulations.—The finger could easily be passed through the wound into the cavity of the abdomen. A quantity of beans and other ingesta were found on the surface of the abdomen, which, as no vomiting had occured, left no doubt that the stomach was also wounded. The patient suffered much pain; his pulse was considerably accelerated, but not wanting in force.

Treatment.—After returning the protruded portion of the omentum, the edges of the wound were brought together and retained by strips of adhesive plaster, together with a compress and roller. The patient was then placed on a litter, conveyed home, and thirty drops of laudanum administered, with directions to repeat the dose in three hours, if necessary.

10, P. M. Was called to dress a small wound on the left arm, just above the elbow, which had been overlooked in the previous examination. On enquiry, learned, that the patient had vomited several times, and had thrown up a small quantity of blood. Pulse about the same as in the early part of the evening. As he complained of excessive thirst, and had drank much water, ice was ordered to be given in small quantities.

Nov. 8th. Saw patient at 6 A. M. Found him breath-

ing with much difficulty, in consequence of which the bandage and compresses were removed. About half a pint of thin dark colored fluid gushed from the wound: he expressed himself much relieved, but his pulse gave evident indication of approaching dissolution.

9 A. M. More feeble; pulse scarcely perceptible. He continued to sink and died at 11½, A. M.

Autopsy, 3½ hours after death.—The external wound was one inch in length, transversely; midway between the spine and sternum; six inches below the axilla, and between the eighth and ninth ribs, making a wound in the intercostal muscles of two and a quarter inches, and extending to within an inch of the corresponding cartilages; passing through the cordiform tendon of the diaphragm, leaving an opening sufficiently large for the passage of the entire stomach, and a part of the transverse colon, together with the omentum. The stomach was perforated at the great cul-de-sac—the opening being about three fourths of an inch long, and situated about four inches from the æsophageal extremity, the mucous membrane everted and of a deep cherry color. The stomach contained half a pint of ingesta. The left lung completely collapsed and of a bluish macerated appearance. The left pleuritic cavity contained about a pint of bloody fluid, composed in a great measure of the contents of the stomach. The heart and right lung normal, as were also all the abdominal and pelvic viscera, with the exception of the stomach. A small quantity of bloody serum found in the convolutions of the intestines and pelvis. No peritoneal inflammation.

ART. V.—*A Case of Heart Disease.* By DAVID W. YANDELL, M. D., of Louisville, Ky.

Through the kindness of a professional friend of this city, I have been furnished with the following brief outline of a very remarkable case of disease of the heart. The subject was a negro man, thirty-five years of age, of good constitution, but intemperate habits.

Towards the close of December last, while recovering from an attack of cholera, his superior and inferior extremities and face, particularly the latter, became edematous, and he suffered almost total loss of vision. Under the influence of mercury, the edema slowly but gradually disappeared, and his sight was partially restored.

In April, when my friend saw him for the first time, his extremities and face were infiltrated; his eyes considerably protruded; conjunctivas distended with serum; sight entirely gone, and he lay in a comatose condition, from which he was with great difficulty aroused. On applying the ear over the precordial region, the impulse of the heart was found to be distinct and strong, and accompanied by a bellows sound, audible over the whole of the organ, apparently most distinct at its base. Pulse strong, full, and not accelerated. Ordered a large venesection, followed by calomel and jalap; under which treatment the cerebral symptoms speedily amended: Mercury, guarded by opium, was administered, with a view of touching the gums, which had been effected but a short time when the bellows sound sensibly diminished, the edema disappeared, and his sight became better. The patient complaining of great weakness, was put upon tonics and allowed generous diet, which, for a time, gave promise of effecting a cure; but, finally, without a return of the edema, with almost complete restoration of vision, the patient died apparently from sheer exhaustion. Ow-

ing to certain circumstances, the heart alone was examined. It was found somewhat hypertrophied, being three or four ounces heavier than the average; its left side healthy; the walls of the right side and the tricuspid valves slightly thickened, and the cavities dilated; whole internal surface of the pericardium was covered with a thin stratum of lymph, most evident at its lower part, and a few flakes of lymph were found floating in a small quantity of serum.

Every reader of the above will concur with me in the regret that only so brief and imperfect a history of this case has been preserved. It is, so far as I know, unique in the annals of science.

Notwithstanding the many and able treatises which have been written on the subject, the diseases of the heart are probably less understood generally, in this country, than any other class of affections. They are diseases that more than any other require to be studied at the bedside, and even here it is desirable, if not essential, to have the guidance and instruction of some one familiar with their manifestations. I deem it unfortunate that Dr. Smith has seen fit, in his translation of Barth & Roger's Manual on Auscultation and Percussion, to omit the table of signs of diseases of the heart contained in the original. He would have laid the profession under still greater obligations to him had he prepared a table of these signs as extensive and accurate as he has one of those of the diseases of the respiratory organs.

With the view of partially supplying this deficiency I herewith offer the table alluded to, translated from the original, and will afterwards add another that I hope will not be entirely without merit.

A TABLE OF THE PATHOLOGICAL SIGNIFICATION OF THE BRUITS DE SOUFFLE.

Souffle before the first sound.			*Auriculo-ventricular narrowing.*
Souffle accompanying the first sound.	Arterial narrowing, or Auriculo-ventricular insufficiency.	Maximum at the base of the heart, with propagation into the large arteries.	*Arterial narrowing,*
		Maximum towards the point of the heart, without propagation into the large arteries.	*Auriculo-ventricular insufficiency.*
Souffle accompanying the second sound.	Arterial insufficiency, or Auriculo-ventricular narrowing.	Maximum at the base of the heart, with propagation into the large arteries.	*Arterial insufficiency.*
		Maximum at the point of the heart, without propagation into the large arteries.	*Auriculo-ventricular narrowing.*
Souffle after the second sound.			*Aneurism of the Aorta.*

Barth & Roger, p. 434.

It will be remarked that the following table, as that of MM. B. & R., embraces alone the diseases of the valves and orifices of the heart.

A SYNOPTICAL TABLE OF ABNORMAL SOUNDS HEARD IN DISEASES OF THE VALVES AND ORIFICES OF THE HEART.

Souffle accompanying the first sound.	Corresponding to the more or less violent impulse of the point of the heart against the thoracic wall;—more or less short, rude, rasping, sometimes whining; absence of the valvular *clacking;* having its maximum at the point; vibratory thrill more or less marked, sometimes synchronous with the impulse of the point of the heart against the thoracic wall and with the arterial pulsation.	Maximum at the point and outside of the left nipple; valvular clack of the first sound preserved along the sternum;—pulse soft, easily compressed; frequent pulmonary hemorrhages. — Insufficiency of the auriculo-ventricular orifice of the left side (consequent upon adhesions or more or less deformation.
		Maximum at the base of the sternum and point of the heart extending also along the whole length of the sternum, with absence of the valvular *clacking* in these regions, while it is heard on the left; pulse soft, compressible; speedy general infiltration, ascites; regurgitation of blood in the auricles; distension of jugulars, &c.; disposition to cerebral apoplexies. — Insufficiency, by adhesion or deformation more or less complete of the auriculo-ventricular orifice of the right side, (less frequent than the preceding.)
	Corresponding to the impulse of the point of the heart, which is very strong, having its maximum at the base; preservation of first valvular *clacking;* generally prolonged, covering in part or entirely the short silence, and encroaching sometimes upon the second sound; frequent vibratory thrill; pulse small and generally hard, irregularity and intermissions in the sounds of the heart and in the pulse.	Maximum at the base of the heart, propagated into the large arteries; frequent pulmonary hemorrhages; pulse hard, irregular and intermittent. — Narrowing of the arterial orifice.
		Maximum at the base; regurgitation in the jugular and communicating veins; general infiltration; pulse small and soft; disposition to cerebral apoplexies. — Narrowing of the orifice of the pulmonary artery (extremely rare.)

Souffle accompanying the second sound.		
Corresponding to the depression of the point of the heart, and consequently to the ventricular diastole; more or less short; with absence of the valvular *clacking*, having itsmaximum at the base; disposition to general edema; sometimes a vibratory thrill synchronous with the diastole.	Absence of valvular *clacking* on the left; *gentle souffle*, disposition to infiltration and to pulmonary apoplexies; pulse bounding, elevated, soft, easily compressed.	Insufficiency by adhesions, or more or less complete deformation of the sigmoid valves of the aorta.
	Absence of the valvular *clacking* of the second sound at the superior part of the sternum; regurgitation of the jugular veins, &c.	Insufficiency of the sigmoid valves of the pulmonary artery (this is very rare—there are only a few examples on record.)
Corresponding to the depression of the point of the heart, and consequently to the ventricular diastole, prolonged *souffle*, occupying almost the whole of the long silence and sometimes encroaching upon the first sound of the next beat; rude, resembling the saw sound; valvular *clacking* preserved; maximum at the point; pulse small and soft; distension of the auricles; forming with the second normal sounds a triple sound in the following order: tic . . . tac . . . f-f-f . . .	Maximum at the point of the heart; intense; outside the left nipple; pulse small, soft; disposition to pulmonary apoplexies; inaudible or heard at least very feebly at the base of the heart and over the sternum.	Narrowing of the auriculo-ventricular orifice of the left side.
	Maximum over the sternum and especially at the base; distension of the jugulars and communicating veins; regurgitation in these vessels; disposition to general infiltration; face injected; disposition to cerebral apoplexies; pulse developed and soft.	Narrowing of the auriculo-ventricular orifice of the right side (very rare.

Before dismissing the subject of diseases of the heart, I have thought that the subjoined case which came under my observation a short time since at the Louisville Marine Hospital, might be read with interest as a striking example of one of the diseases under consideration.

Mr. S. S., æt. 40 years, a native of Massachusetts, a hatter, of bilious temperament, sober habits and good constitution, was admitted into the hospital on the 7th of July. Fifteen weeks before he was treated in the city for an attack of acute rheumatism which supervened upon exposure to cold. It affected principally the smaller joints and confined him to his bed for twenty-one days. He now recommenced his work though still suffering with sharp pains in the shoulders, superior part of the chest, elbow and wrist joints and fingers, which two last were swollen and very stiff. This condition of things becoming daily more and more aggravated he was obliged to give up work and enter the hospital.

Condition at the time of Admission.—Surface of the body pale, of the natural warmth and moisture. Countenance expressive of pain. Pain in the parts above mentioned, particularly in the superior part of the chest, precordial region and neck. Finger joints still somewhat swollen and stiff. Appetite good, tongue clean, bowels regular. Rests well at night. Pulse natural. Limits of the heart upon percussion normal. On applying the ear over this organ its sounds appear confused: impulse and rythm natural. A distinct bellows murmur after the first sound was perceptible over its whole extent; at the sigmoid valves the sound assumed the character of the gentle friction sound which was propagated along the aorta to its arch. The peculiarity in this friction sound was its strong resemblance to crepitation. The valvular *clacking* of both sounds of the heart was normal.

Diagnosis.—Effusion of lymph, which at some points has been organized and contracted adhesions over the

whole internal surface of the pericardium; deformation of the aortic valves, both resulting from previous endo and exocardial inflammation.

Treatment.—The patient was ptyalized; constant counter irritation set up over the heart, and Dover's powder in combination with the nitrate of potash administered with the view of their anodyne and diaphoretic effects. This treatment was pursued for two weeks; at the end of the first week the bellows murmur was less loud and distinct than before; friction sound the same; pain much less.

On the 21st, eight days after this time, the patient left the hospital to resume his work. The pain had almost entirely disappeared. The friction sound was undiminished; the bellows murmur was evidently much less intense though still clearly perceptible; the impulse and sounds of the heart were materially the same as at the time of his admission.

It need hardly be said that Mr. S. left the hospital much against my will, but urging that he had a wife and children who depended on his labors, I could not refuse his request although I felt that he was still unfit to renew his somewhat laborious profession. I prescribed for him at the time of his discharge, c. syrup sarsaparill. oj. and potass. hydriodat. ℈i.: M. Dose, two tablespoonsful three times aday.

I cannot do better than conclude the present article with the remarks of MM. Barth & Roger on the pathological signification of the bellows and friction sound.

The sounds which accompany organic lesion of the heart are sometimes *soft*, but more frequently *rough*, and resemble *rasping*, *filing sounds*, &c. On the other hand, *blowing sounds without* material lesion are in the majority of caseses *very soft*. The *former* accompany either the *first or second sound* of the heart; the latter are always heard during the *first*, and *never during the second*. The

former are *constant*, and last for *months* or *years;* the latter are *intermittent* and *transient.* The *former* undergo progressive transformation from the *gentle souffle* to the *musical sounds*, in proportion to the length of time they exist, and as the lesions of the orifices become more *extensive* and *deeper seated*, the latter uniformly preserve their character of softness, whatever may be their modification of intensity.

Finally, *the rough sounds* are accompanied by local and general symptoms characteristic of disease of the heart. (dulness on percussion, a purring sound, irregularities of the pulse, considerable edema of the inferior extremities,) whilst none of these phenomena show themselves either in anemia or chlorosis, at least, in a decided or persistent manner.

The existence of a material lesion being admitted, the next point is to discover its nature. The souffles indicative of pericarditis, hypertrophy, the formation of a clot in the cavities of the heart, &c., are accompanied by peculiar symptoms, such as—prominence and dulness of the precordial region, diminution of impulse with feebleness and distance of sounds (pericarditis,)—dulness, increase of intensity in the sounds and impulse (hypertrophy,)—the sudden appearance of an abnormal sound with smallness of the arterial pulse (formation of clots.) These lesions being well marked by their diagnostic signs, there remain only the diseases of the orifices and valves, and in the consideration of their principal effects these may be arranged under two heads, *narrowings* and *insufficiencies.*

How shall we discover whether there be *narrowing* or *insufficiency?* To reply to this question we must first examine the *time* to which the abnormal sound belongs, determine whether it precedes or accompanies the systole, or whether it coincides with the diastole of the heart, and we can deduce from it the morbid signification of the souffle, by recalling what takes place at each of these movements. Now reason and experience demonstrate that *a souffle accompanying the first sound may indicate either a narrowing of the arterial orifices*, (causing increased friction of the blood in its onward progress,) or *an insufficiency of the auriculo-ventricular opening*, (which also gives rise to friction during the reflux of the columns of the blood.)—On the other hand, *a souffle accompanying the*

second sound, indicates arterial insufficiency, or, more rarely, *an auriculo-ventricular narrowing. The sign of this last alteration, is frequently a pre-systolic souffle.*

The precise determination of the situation of the diseased orifice will now decide what is the nature of the lesion.

If we decide, for example, that there exists a lesion of the arterial orifice, in a case where the souffle replaces the first sound of the heart, we shall have diagnosticated an arterial narrowing.

But the seat of disease may be discovered by an accurate knowledge of the place where the maximum of the *souffle* is produced, and by considering whether it is extended into the large vessels, or whether it is heard only around the region of the heart. In fact, the souffle dependent upon a lesion of the sigmoid valves, has its maximum intensity above the nipple at the base of the heart, and may extend into the large arteries, whilst that dependent upon alteration of the auriculo-ventricular valves, has its maximum below the nipple, nearer the point of the heart, and does not extend into the great arterial trunks.

If, then, a souffle accompanying the *first sound* has its *maximum intensity* at the *base of the heart*, and *extends into the large arteries*, it will indicate *arterial narrowing.* A souffle accompanying the first sound which has, on the contrary, its *maximum* at the *point* of the organ, *without* extending into the great arterial trunks, will indicate *auriculo-ventricular insufficiency.* On the other hand, a souffle accompanying the *second sound*, having its *maximum intensity above the nipple*, and *extending* into the *great vessels*, will announce *insufficiency of the sigmoid valves:* whilst the same sound, if it should have its *maximum below the nipple without* extension into the great arterial trunks, will diagnosticate *auriculo-ventricular* narrowing.

ART. VI.—*A Case of Cholera, with Remarks.* By R. L. SCRUGGS, M. D., o Germantown, Tenn.

At 8 o'clock on the morning of the 20th of June, I was called in consultation to a man who had arrived in our village and been taken sick about an hour before. The

patient, æt. 35, was a cattle driver from North Mississippi, who, during a few days' stay in Memphis, lodged in a house near the Bayou, where cholera had prevailed from its commencement with greater violence and fatality than in any other portion of the city. He had labored, as I afterwards learned, under diarrhea for several days before. When I saw him he had had several serous dejections in quick succession, accompanied by pretty violent vomiting of watery matters, and cramps. His face wore an exceedingly anxious expression (occasioned probably partly by fear); his extremities were cold; the surface of his whole body bathed in sweat and suffering from great prostration of the vital energies. Pulse 128 and very feeble. Except a small quantity of blue pill and Dover's powder he had taken nothing previous to my arrival. The following prescription was agreed upon.

℞ Hydrarg. submur. grs. x.
Capsic.
Plumb acet. aa. grs. v.
M. To be taken immediately.

In addition to this, sinapisms were applied along the whole course of the spine, over the abdomen and lower part of the chest, and his extremities were well rubbed with equal parts of pepper and mustard. After the lapse of half an hour I gave him 40 drops of camphor dissolved in chloroform, prepared according to Dr. T. S. Bell's formula, which almost immediately caused his countenance to brighten up, and produced a most agreeable sensation of warmth about the stomach. This was repeated once or twice with the same happy results, and, in addition to which, it reduced the frequency and increased the force of the pulse.

We now left the patient, directing the calomel, sugar of lead and capsicum to be repeated every two hours, but in smaller quantity than at first; the perspiration to be wiped off constantly with a coarse cloth; the sinapisms

to be reapplied occasionally, the extremities to be rubbed with the dry mustard and pepper; and the chloroform and camphor to be administered as before, provided the vomiting should at any time recur, or there should be anything like collapse or sinking, or cramps.

At 8 o'clock in the evening, when I saw him again, although his whole body, particularly his extremities, felt cold and shriveled, yet there was an improvement, (pulse 112 and stronger); and when I was informed that the patient had discharged about a pint of dark colored consistent bile from his bowels, I felt perfectly satisfied with his condition.* During the night he had two other bilious passages, and when I saw him early the next morning reaction was perfect. The patient himself expressed astonishment at his strength compared with the great prostration the day before; said he felt quite well, and asked for some food, which was allowed him in the shape of chicken broth. The after treatment consisted in a small dose of hydrarg. cum. cret., assisted by a mild purgative. In three days afterwards the patient started home, and I have not since heard from him.

It will be observed that no brandy or opium was used in this case, except the small quantity of Dover's powder at the commencement. I think that the chloroform and camphor, or chloroform alone will be found to be an admirable substitute for these articles, producing no narcot-

---

* Durrng the epidemic of 1832 and 33, I saw Dr. Rose treat a number of cases of cholera at Memphis, and with more success than any physician there; and although at that time, I had not even commenced the study of medicine, I distinctly recollect that he mainly relied upon small doses of calomel repeated at short intervals; and when he succeeded in bringing away "*black* bile," which he rarely failed to do, he pronounced his patient safe, and in this he was never mistaken. At the same time I saw other patients die with more than two thousand grains of calomel in them, administered in doses of from 60 to 80 grains, without even having a single bilious discharge.

ism, nor any after depression, such as invariably follows the free use of alcoholic stimuli. I would not have it inferred from this, however, that I think that these articles, particularly opium, could in no case be advantageously used; but I do believe that a vast deal more mischief has been done with them, in this epidemic, than good. Indeed I feel perfectly confident that I have seen recently several persons in Memphis, in a dying condition from the effects of brandy and opium, and have heard of many other similar cases from some of the most respectable physicians of that place. For the extensive mischief done during the present epidemic with these two articles, I think we are mainly indebted to the injudicious essays of Doctor Hawthorn of Liverpool, Eng., republished by the public press in this country.

Cholera has prevailed in Memphis about fifteen miles distant from this place, from early in January to the present time. Its progress and intensity have more than once sensibly fluctuated since its advent. Several times it was thought to have disappeared when it would again recur with apparently increased malignity. No case that I am aware of has as yet originated in the country, though several persons after leaving the city, have been attacked, some of whom have died.

Diarrhea, dysentery and severe cholera morbus have all been more prevalent here this than for many previous years; but, so far as I am informed, little fatality has attended either disease. Notwithstanding which, it will not be considered unphilosophic, I presume, to conclude that there exists some relationship between the remote and proximate causes of these diseases, and genuine Asiatic cholera, especially when we observe that they prevail epidemically, previous to the appearance of cholera. Indeed I have been disposed to extend this idea still further back, and include influenza and its accompanying cerebro-spinal affections, in the same category: but my ideas upon

this obscure subject are not sufficiently matured for me to venture a positive opinion upon it. That they have been precursory of the disease in many, if not all of the places visited by cholera, is a fact well calculated to cause a suspicion, at least, of a common origin; and ought certainly to excite inquiry upon the subject. Even should this inquiry result in a failure to detect the true etiology of cholera, yet if we succeed in distinctly recognizing the diseases which precede and follow it (if indeed there really be any uniformity in this), we will have gained that which will undoubtedly materially assist us in our precautionary efforts, and sanitary means to be used before, during and after the prevalence of this destructive malady.

That the disease sometimes commences in so mild a form as to cause doubts in the minds of even medical men, as to the diagnosis; gradually sometimes, but often rapidly increasing in virulence until it attains its climax—then gradually becoming more and more mild until it entirely disappears—are facts connected with its history, which go strongly to favor the idea, that the diseases which resemble, precede and follow cholera, are produced by the same morbific agency in a *less concentrated form.* The fact that the milder diseases of this class prevail epidemically in the country, in the immediate vicinity of cities, simultaneously with the cholera in those cities, is explicable upon the same hypothesis. And this brings me to the question so frequently asked—is cholera contagious? I answer, that although I have seen a great many cases of cholera, in all stages of the disease and never had a symptom of the disease myself, yet I do believe the disease to be contagious. Less so, undoubtedly than smallpox, and many other diseases, yet certainly so to an appreciable degree; if by contagion is meant that the body of the diseased person is capable of eliminating a poison similar to that which produced the disease, thus adding to that already present in the atmosphere. The

facts in support of this opinion are, I think, more numerous and conclusive than those opposed to it. Hence, when questioned upon this point I always advise, when practicable, an avoidance of the infected district, and particularly the houses in which persons have died of cholera.

I may mention, before closing this communication, that I have recently used the solution of camphor in chloroform in one case of hysteria, one of mania-â-potu, and one of severe cramp colic, and at each repetition have been more and more pleased with its effects.

Germantown, Tenn., July 10, 1849.

REVIEWS.

Art. VII.—*Anæsthesia, or the Employment of Chloroform and Ether in Surgery, Midwifery, etc. etc.* By J. T. Simpson, M. D., F. R. S., E. Prof. Midwifery in the University of Edinburg, Physician Accoucheur to the Queen in Scotland, &c. &c. 1 vol. 8vo. pp. 248. Philadelphia, Lindsay and Blakiston, 1849.

Medicine is eminently a progressive science. From the time when man's ingenuity first lent a helping hand to his benevolence, in order to devise means for the relief of suffering humanity, down to the present day, there has been making a constant, untiring series of efforts to extend the boundaries of this noble science, and widen its sphere of usefulness. Success triumphant, though not complete, has crowned these efforts. Medicine, in its primal stage, wrapped in the swaddling clothes of rude simplicity and dubious utility, is now of lofty stature and stands erect—a science built upon truths and principles as immutable as the eternal hills—and an art conferring in the daily exercise of it, untold benefits and countless blessings to thousands. Its progress has been slow, but sure. Thousands of years have rolled away since the sprouting of its germ—and none can say how many more thousands must elapse before the tree has attained its complete growth. But its fruit, if not entirely matured, is already sweet to the taste and invigorating to the body—and year

by year, month by month, and day by day, it is becoming sweeter and more invigorating.

Certainly, practical medicine has greatly improved since the days of Hippocrates, and undoubtedly the modern surgeon is far superior to the self-important individual who formerly held the united office of surgeon, cupper, leecher, bleeder, dentist and barber. Yet all this superiority failed in doing more than mitigating the sufferings and the pain of those who required the surgeon's aid. For a long time it had been the darling dream of those who, in the use of instruments, daily witnessed so much suffering, that perhaps a means of avoiding it would one day be found. The desire at length has been gratified; the vision has come to pass; the dream has been realized.

In regard to the history of the discovery of anesthetic agents—to whom belongs the honor of having first found out their efficacy and brought them into notice—it is not our purpose now to speak. Their *practical utility* is a matter of far more importance; and Dr. Simpson's work forms a suitable foundation whereon to build the few remarks we have to offer on this point.

When a new remedy is proposed to the profession as worthy their adoption, two questions instantly arise—questions which must be answered in the affirmative, before its claims can be universally or even generally recognized. These are, 1st. Is it adequate in any degree to meet the ends proposed? And 2d. Is it safe? Let us apply these questions to the use of anesthetics.

1st. Are they adequate in any degree to meet the ends proposed? What is expected to be gained by their use? Their advocates say, and challenge investigation, that these agents are capable of wholly destroying the pain attendant on surgical operations, in a large majority of cases, and greatly mitigating it in all. This, if true, is not the "trivial matter" that Majendie and other oppo-

nents of etherization would have us believe; and that it is true, few will now have the hardihood to deny. The voice of those members of the profession who have given it a fair trial in a proper way, is so unanimous in its testimony as to this point; and is swollen by such a large and united concourse of those who in their own persons have made use of it, gratefully acknowledging their exemption from suffering—that it would almost be insulting the intelligence of our readers to offer new and repeated proofs. More than two years ago, Dr. Forbes, in a very able article in the British and Foreign Review, wrote as follows—and every operator who uses these agents confirms his account—

For the purpose of obtaining information on all the points of this most interesting subject, we personally questioned all the patients in the London hospitals, who, at the period of our visits, still remained in the wards after the ether operations. They were in all *fifty-four*, and the great majority had been the subjects of capital operations. They were unanimous in their expressions of delight and gratitude at having been relieved from their diseases without suffering. In listening to their reports, it was not always easy to remain unmoved under the influence of the conceptions thereby communicated, of the astonishing contrast between the actual physical condition of the mangled body in its apparent tortures on the operating table of a crowded theatre, and the really happy mental state of the patient at the time. The old story of the magician in the Arabian Tales seemed more than realized before us, the ether being like the tub of water, one moment's dip of the head into which produced a life-long vision in the dreamer's mind.

But, furthermore: it is asserted that not only does the use of anesthetics abolish the pain attendant on surgical operations, which, we repeat, is no "trivial matter," but that it conduces largely to the restoration of the patient, and gives him a better chance of ultimate recovery. The proof of this is two-fold. First, the authority of a multi-

tude of intelligent, experienced and candid observers concurring in the assertion, that after severe operations the constitutional disturbance is less and convalescence more rapid in patients who have been etherized, than in those who have not: and second, statistics of a sufficient number of cases to render this view of the case extremely *probable*, though, of course, not absolutely certain.

Chapter V of the work now under notice, is headed "Value and Necessity of the Numerical Method of Investigation as applied to surgery"—and chapter VI contains some interesting statistics in regard to etherization. We wish we could transfer both of them in full to our pages—we are sure they would amply repay perusal: but we must content ourselves with the concluding pages of the latter:

No. VI.—*Table of the Mortality of* 618 *Amputations of the Thigh, Leg, and Arm, without Etherization, performed during the last few years in* 30 *British Hospitals.*

Seat of Amputation.	PRIMARY.			SECONDARY.		
	No. of Cases.	No. of Deaths.	Per-centage of Deaths.	No. of Cases.	No. of Deaths.	Per-centage of Deaths.
Thigh, -	73	45	63	211	62	29
Leg, - -	80	26	32	135	23	17
Arm, - -	77	17	22	42	10	24
TOTAL, -	230	88	38	388	95	24

GENERAL MORTALITY OF AMPUTATIONS OF THE THIGH, LEG, AND ARM, UPON PATIENTS IN AN ETHERIZED STATE.

In the preceding lengthened Table, No. I, (p. 72,) I have given from forty-nine different hospitals the detailed reports of 302 amputations of the thigh, leg, and arm.

When these 302 amputations are reduced into a tabular form, similar to those which I have used for stating the data of similar amputations without ether, they present the following results:

No. VII.—*Table of the Mortality of* 302 *Amputations of the Thigh, Leg, and Arm, under Etherization.*

Seat of Amputation.	PRIMARY.			SECONDARY.		
	No. of Cases.	No. of Deaths.	Per-centage of Deaths.	No. of Cases.	No. of Deaths.	Per-centage of Deaths.
Thigh, -	24	12	50	121	25	20
Leg, - -	32	9	28	81	13	16
Arm, - -	17	4	23	27	8	29
TOTAL, -	73	25	34	229	46	20

I shall now proceed to contrast these results with the results of the same operations in the same class of hospitals, and when performed upon patients not in an etherized state.

Before doing so, however, let me observe in passing, that the data I have adduced in Tables No. I. and V., (pp. 72, 76) have been objected to on the ground that they are collected from too many different hospitals, and too many different sources. But, on the contrary, I believe all our highest statistical authorities will hold that this very circumstance renders them more, instead of less trustworthy. Professor Chomel of Paris, after pointing out the first requisite for a successful statistical comparison of therapeutic or other results—viz., a sufficient similarity between the number of collated cases—adds, as the second condition, "that the data be numerous, collected at different times, in different places, and, if possible, by several observers. It is easily seen (he adds) that the results of a number of facts too limited, collect-

ed in a short space of time, in a single place, and by a single observer, however exact as regards that individual series of data, may yet be very different from, or even the reverse of conclusions drawn from a larger series, and one collected under various circumstances."

COMPARISON OF THE MORTALITY FOLLOWING THE LARGER AMPUTATIONS OF THE LIMBS, 1. WITHOUT, AND 2. WITH ETHERIZATION.

The major amputations of the limbs, including those of the thigh, leg, and arm, are generally fatal in hospital practice in the proportion of about one in every two or three operated upon. In the Parisian hospitals, the fatality, according to Malgaigne, amounts to upwards of one in two. In Glasgow, it is two and a half. In British hospitals, I found that under these amputations one in three and a half died. The same operations, performed in the same hospitals, and upon the same class of patients, in an anesthetic state, present a mortality of 23 in 100, or 1 in 4, only. The following table shows the amount of the individual cases, and the per-centage of deaths in different collections, with the corresponding proportion of deaths in those operated on in an etherized state.

No. VIII.—*Table of the Mortality of Amputations of the Thigh, Leg, and Arm.*

Reporter.	No. of Cases.	No. of Deaths.	Per-centage of Deaths.
Parisian Hospitals—Malgaigne,	484	273	57 in 100
Glasgow Hospital—Lawrie,	242	97	40 in 100
General Collection—Phillips,	1369	487	35 in 100
British Hospitals—Simpson,	618	183	29 in 100
Upon Patients in an Etherized State,	302	71	23 in 100

The evidence which the preceding table affords in favor of the greater safety of amputation with ether than without it, is sufficiently strong and striking. While 23 in 100 died under the amputations named, when the operations were performed upon patients in an anesthetic

state, 29 in every 100 died under the same amputations in the same hospitals when the patients were not etherized;—in the Glasgow hospital as many as 40 in 100 died —and in Paris, as many as 57 per cent. In other words, out of every 100 persons submitted to amputations of the thigh, leg, or arm, the lives of 6 were, by the employment of etherization, saved above the average number of the same operations in British hospitals;—17 lives in each 100 were saved, if we take the Glasgow returns as a standard of comparison; the average mortality was, under ether, less by 34 in every 100 cases than that which was found by Malgaigne to accompany the same operations in the Parisian hospitals.

But probably, to most minds, this comparison would be rendered more clear and simple, if we took not a class of operations, but a single operation as a standard and medium of comparison. For this purpose, let us select amputation of the thigh as the *individual* operation regarding which we possess the largest series of observations.

COMPARISON OF THE MORTALITY FOLLOWING AMPUTATIONS OF THE THIGH, 1. WITHOUT, AND 2. WITH ETHERIZATION.

There are few or none of the operations deemed justifiable in surgery, that are more fearfully fatal in their results than amputation of the thigh. "The stern evidence (says Mr. Syme) of hospital statistics shows, that the average frequency of death is not less than from 60 to 70 per cent.;" or above one in every two operated on die. Out of 987 cases of amputation of the thigh collated by Mr. Phillips, 435 proved fatal; or 44 in every 100 were lost. "On referring (observes Mr. Curling) to a table of amputations in the hospitals of London, performed from 1837 to 1843, collected with care by a private society to which I have the honor of belonging (the Medical Society of Observations), I find 134 cases of amputation of the thigh and leg, of which 55 were fatal, giving a mortality of 41 per cent." Out of 201 amputations of the thigh performed in the Parisian hospitals, and reported by Malgaigne, 126 ended fatally. In the Edinburgh Infirmary 21 died out of 43. Dr. Lawrie found the mortality attendant upon this operation in the Glasgow hospital to amount to 46 deaths in 127 cases. In the collection of cases from 30 different British hospitals which I

have published in Table No. V. (p. 76), 284 cases of amputation of the thigh are reported; 107 out of these 284 operations proved fatal. On the contrary, I have collated 145 cases in which the same operation has been performed during the past year in British hospitals upon patients in an etherized state. Out of these 145 cases of amputation of the thigh, only 37 proved fatal. Or, in other words, the fatality was not greater than one in every four operated on when the patients were previously etherized. It was as high as one in every two or three operated on when the patients were not previously etherized. The following Table presents these results in a more clear form :—

No. IX.—*Table of the Mortality of Amputation of the Thigh.*

Reporter.	No. of Cases.	No. of Deaths.	Per-centage of Deaths.
Parisian Hospitals—Malgaigne, - - - - -	201	126	62 in 100
Edinburgh Hospital—Peacock, - - - - -	43	21	49 in 100
General Collection—Phillips, - - - - -	987	435	44 in 100
Glasgow Hospital—Lawrie, - - - - -	127	46	36 in 100
British Hospitals—Simpson, - - - - -	284	107	38 in 100
Upon Patients in an Etherized State, - - -	145	37	25 in 100

The preceding figures speak in a language much more emphatic than any mere words that I could employ in favor of anesthesia, not only as a means of preserving surgical patients from pain, but as a means also of preserving them from death. Between even the lowest mortality in the table without ether, 32 in 100, and the rate of mortality with it, 65 in 100, there is the difference of 11 per cent. That is to say, according to this standard, out of every 100 patients submitted to amputation of the thigh without anesthesia, 11 more would die from the operation than if the same 100 patients were submitted to the same operation in a state of anesthesia. And if the condition of anesthesia effects thus a saving of 11 lives in every 100 amputations of the thigh;—then out of every 1000 such operations the lives of 110 patients would be preserved by the use of anti-pathic means.

If we compare these results with the standard of Mr.

Phillips, the contrast is still more startling. Out of 987 amputations of the thigh collected by him, 435 proved fatal; or 44 in the 100. Out of 145 amputations of the thigh under anesthesia, 37 proved fatal, or 25 in 100.—According to this comparison, the amount of persons saved from death in amputation of the thigh by the patients being rendered anesthetic during the operation, amounts to 19 lives in every 100 operations performed.

Surely the opponents of etherization should cease their opposition until they can bring *facts* and *figures* to controvert these—instead of the unfounded assertions, hasty deductions and prejudiced opinions which have marked the course of a portion of those who will not adopt this new practice. Others of them, and these doubtless constitute by far the greater portion, both in point of numbers, respectability, and professional eminence, object to the use of anesthetics, because already, in the short time in which they have been in use, quite a number of cases have occurred in which death followed their exhibition; and this brings us at once to the second question raised above, viz: Is the use of these articles safe and prudent?

That ether and chloroform are both most powerful agents, none will deny. That they should be used with caution and only by the physician, their stoutest advocates will freely admit. That they are *dangerous*, in any proper sense of that word, or that the evil accruing from their use in any degree balances the good, they and we do not, and until more and better proof is given than we have yet seen, cannot believe.

Death has, undoubtedly, in more than one instance, followed the employment of these agents—and followed them so instantaneously that there can be no reasonable doubt as to whether or not they were really the producing cause. This result may have been due to one of two things:

1. The impurity of the agent employed.

2. To a peculiar condition, inherent in the constitution and not to be foreseen by any ordinary sagacity, which of necessity brings about this result.

This latter, we think, is the most probable, or rather the most frequent cause of these ill effects. At any rate, for the sake of argument we will admit it to be so. Now, if merely because the systems of a few—a very few—will not bear the exhibition of any given medicine, it must be discarded from the list of remedial agents, many of the most important reliable weapons with which the physician has to combat disease must be thrown aside as worse than useless. Opium, arsenic, digitalis, hydrocyanic acid, calomel, the lancet, &c., &c., must all be dispensed with, because all, in some cases, have done damage. One of these agents—calomel—has repeatedly, over and over again—and that in spite of all reasonable prudence on the part of the administrator—produced the most horrible deformities, the most acute and poignant suffering, and finally death itself: and yet is there an intelligent physician in this country who would dispense with its use on that account? Most assuredly not. And why? The answer is obvious—because the good which it is capable of doing, and does do, far overbalances the evil which it has done, and, used prudently, can do. And so of the others—and why *not* so of ether and chloroform. Apply the same reasoning to them: nay, go farther, and suppose that they alone were capable of occasionally bringing about an unfortunate issue—that the lancet and digitalis and calomel could not with justice be charged with any such result—yet would we not still be justified in the use of them? Let us return for a moment to our statistics. It is admitted on all hands that these agents do produce the effects ascribed to them—viz: the abolition of all sense of pain—nay, frequently lap the patient in perfect elysium, while otherwise he would be suffering the torments of the damned. Is that nothing? We

have, too, the united voice of all who have used them, bearing witness to the fact that the recoveries are more rapid than they otherwise would be. Is that nothing? And, to crown all, we have statistical tables based upon the results of a large number of operations—performed, most of them, in hospitals, and hence as nearly as possible under the same circumstances, on the same class of people, by the same operators—showing conclusively that these articles, so far from being *destructive*, are in a high degree *conservative*. Turn back, reader, and ponder over the two concluding paragraphs of the extract we have given from Dr. Simpson's book.

"Between even the lowest mortality," he shows, "in the Table [No. IX.] without ether—36 in 100—and the rate of mortality with it—25 in 100—there is a difference of *eleven per cent.*" That is, *etherization saves* 11 *people out of every* 100 *who undergo a capital operation*—110 *out of every* 1000. Does it kill 110 out of every 1000 *who take it?* No. Does it kill 10 in that number? It is not so pretended. Does it kill *one?* Most indubitably *not*.

They who object to the use of it, because it is *unsafe*, have here some food for further reflection.

A medical journal is hardly the most suitable place to discuss the general question of utilitarianism; and if it were, the writer by no means considers himself able to conduct such a discussion—but it does seem to us perfectly plain, that "the greatest good of the greatest number," is an axiom as fairly applicable to *medical* science as any other science, and medical practitioners are as much bound to act upon it as any other class of individuals.

While we have no shadow of right to resort to etherization in any case where serious results may be fairly apprehended, and while it would be nothing more nor less than downright murder to use it where from any circumstances we judged it would be likely to produce the bane-

ful effects ascribed to it; yet surely considerations of high magnitude call for it in a multitude of cases. For, it has been shown that the administration of anesthetics *certainly saves* many more lives than it has been ever charged with destroying. And, for our part, it seems to us more reasonable to say to one who refuses, in the performance of capital operations, to resort to these agents, "*You, sir, are responsible for eleven of every hundred deaths that occur in your practice under these circumstances*," than to lay an accidental occasional misfortune—rare in its occurrence, and by no means always clearly traceable to the employment of these articles—to the door of him who uses them when this use is encouraged by humanity, supported and sustained by the most cheering results, and imperiously demanded by a regard for human life.

The application of these same agents to another very extensive and important branch of practical medicine—obstetrics—is of even later date than that of which we have just been speaking, and has met with still greater opposition.

The same objections meet us here—*inefficiency* and *danger*—that have been so often and so futilely urged against the use of these articles in surgery; and experience already has shown them to be no sounder.

A little more than two years ago, Dr. Simpson, Professor of Midwifery in the University of Edinburg, determined to use, on the first suitable occasion, the vapor of sulphuric ether, in order to try if the same favorable results might not be obtained for the relief of this form of suffering.

The first case in which it was tried, was one in which there was much deformity of the pelvis. Now as the capability of ether to abolish sensibility had been fully proved, and its alleged danger to life disproved, the only question of any practical importance was, would it arrest the contractions of the uterus as well as the sufferings

that arise from them? As version would here be required at any rate, it mattered little, so far as this case was concerned, whether it did or not; and therefore it was deemed a most suitable one for the experiment—which was accordingly made, with the most perfect and encouraging success. But little time was allowed to elapse between the moment of rendering the patient unconscious and the completion of the delivery; but during that time the uterine contractions were strong and energetic.

On questioning the patient after her delivery, she declared that she was quite unconscious of pain during the whole period of the turning and extracting of the infant, or indeed from the first minute or two after she commenced to breathe the ether. The inhalation was discontinued towards the latter part of the operation, and her first recollections on awaking were "hearing," but not "feeling," the head of the infant "jerk" from her (to use her own expressions), and subsequently she became more roused by the noise caused by the preparation of a bath for the child. She quickly regained full consciousness, and talked with gratitude and wonderment of her delivery, and her insensibility to the pains of it. Next day I found her well in all respects. I looked in upon her on the 24th (the fifth day after delivery), and was astonished to find her up and dressed, and she informed me that on the previous day she had walked out of her room to visit her mother. Mr. Figg informs me that her further convalescence has been uninterruptedly good and rapid.

Since this case was published, a day or two after, ether and chloroform (the *anesthetic* powers of which were discovered by Dr. Simpson, in his search after some more pleasant and agreeable agent than ether) have been used in an immense number of cases; and *uniformly*, so far as we have been able to learn, with the happiest results. Can as much be said for any other medicine?

The distinguished professor has used it with "*unvarying success:*" and be it remembered, he administers it in

all cases of labor, whether natural or preternatural. Drs. Duncan and Norris, house-surgeons to Maternity Hospital, Edinburg, say:

On the whole, the results of anesthetic midwifery, as observed by us in the hospital, have been perfectly satisfactory; and we can confidently state that the recoveries have been altogether more perfect and speedy than before. This has been remarked in so great a proportion of the cases, that there can be no doubt whatever of the truth of the observation. Besides the increased rapidity of recovery, we have noticed the almost entire absence of those uncomfortable feelings of fatigue, languor, and shivering, and of that shattered feeling which so frequently comes upon the mother immediately after an ordinary delivery. Instead of this, we have found the mother almost invariably awake from the anesthetic sleep comparatively fresh, easy, and cheerful. Not unfrequently the anesthetic has been found to change, without an intermission, into a natural sleep, which may continue for an hour or two.

Further, there have been, since the introduction of chloroform into the practice of the hospital, far fewer than formerly of those violent attacks of rigors, ephemeral fevers or weeds, and abdominal pains, which are so common in most crowded hospitals, forming a class of cases which used formerly to cause much anxiety, and was a common cause of the mother's being detained in the hospital after the usual fortnight allowed for recovery. In fact, since using chloroform, there have been scarcely any women detained in the house by these causes, and much less Dover's powder, calomel and opium, abdominal fomentations, &c., have been used.

The women have been, invariably, found deeply grateful for the relief to their sufferings afforded by the anesthetic influence of chloroform.

Dr. Keith says:

I have employed chloroform in every case of labor under my care, since its introduction, with one exception; and also in almost every case to which I have been called

in by other practitioners. * * * I can state most positively that I have seen no serious symptoms, which could be traced to the chloroform, in any one case, either as affecting the mother or the child. Most of the mothers have made uncommonly good recoveries. Those who have had children previously, have, almost without exception, stated to me, that they felt very decidedly stronger after delivery than on former occasions. In two cases the recovery was rather slow, but this was owing to the patients having been in a very delicate state during pregnancy—and, in both instances, I considered the chloroform was of very great service, by saving their strength. In *none* of these cases was the child still-born.

Says Dr. Moir of Edinburg:

Since the beginning of December, I have, with a very few exceptions, used chloroform in the course of my midwifery practice, and I have not met with a single case where any unpleasant effects, either to the mother or child, can be traced to its use.

Hear Dr. Malcolm:

Since November last I have employed chloroform in above thirty cases of labor, and with the most satisfactory and delightful results. A majority of these were first labors. I have kept my patients under it for periods varying from half an hour to six hours, and have never found the slightest unpleasant effects result from its use. All the children have been born alive, and are at this moment in perfect health, with the exception of one that died when about a month old, of a sudden and severe attack of dysentery. All the mothers have made recoveries with rapidity and completeness, far above the average which I had previously observed in my practice. This has struck me as the more remarkable, seeing a large proportion of my patients were primiparous; and I can only attribute this result to the entire absence of suffering and shock to the nervous system which is effected by the use of chloroform.

Dr. Burns of Edinburg says:

I regret that I cannot give you the number of cases of labor in which I have exhibited the chloroform, but I may state that I have given it repeatedly, and have not seen any bad consequences either to the mother or child result from its use.

All the mothers made rapid recoveries, and the children did not appear to suffer from its use.

I have given the chloroform in three or four cases of adherent placenta where the uterus was firmly contracted —and had far less difficulty in extracting it than I have experienced in similar cases where the chloroform was not exhibited.

Dr. Purdie speaks in this fashion:

I have now used chloroform in seventeen cases, which I have noted, and in every instance with decided effect, not merely by lessening suffering, but I am perfectly convinced, by the most careful observation, by shortening the duration of labor. The pains have never in my experience been interfered with, except by rendering them quicker, and far more effectual.

And then Dr. Cumming:

I am quite satisfied that, if properly given, it acts as a calmative; and I believe, from what has passed under my observation, that very many of what are called exceptional cases are not so in reality, but appear to be such from error in the mode of administration, and that further experience will amply demonstrate the truth of this.

In short, I am, unfortunately for the appearance of veracity, compelled to say, that all my cases hitherto have been so successful, the recoveries so uniformly good, and the satisfaction on the part of the patient (I may add also my own) so great, that I am rapidly approaching to, if indeed I have not already arrived at, the conviction, that, *if there be any sin connected with chloroform, it is chargeable on those who refuse to administer it.*

I may add, that not one of those patients who have already inhaled it will ever be denied it in any subsequent pregnancy, as they have repeatedly assured me; and certainly I shall not attempt to keep it from them, and that not more for their sake than my own.

Dr. Grigor of Nairn uses this strong language:

Dr. Allan of Forres and myself would as soon think of going to an obstetric case without our chloroform phial, as we would of going to bleed a patient without a lancet. In this quarter, doctors are only called in when things are going wrong, or in extreme cases; so that, since your grand discovery, he and I have only used it in about twenty-four cases, in all which it came up to all you have written about it,—no still-born children—mothers recovering well—fewer after-pains, &c. &c. One of my cases was a first child, the mother nearly forty-eight years of age, weakly in constitution, and of small formation. Had it not been for the chloroform, I do think she would have sunk.

Dr. Protheroe Smith says:

I have records in my own practice and that of my friends, of upwards of 125 cases of anesthetic labor; and with one exception, all have done well. In several thus treated, no hemorrhage has ensued, though in previous labors there was flooding. In nearly all, the getting up has been more speedy, requiring no aid of opiates and purgatives; and it is my sincere conviction that chloroform lessens the chance of puerperal inflammation and fever.

And so say hundreds and thousands of others—men equally capable of observing and candid in reporting—upon whose judgment, accuracy and sincerity, implicit reliance may be placed. In the New World, as well as the Old, witnesses—not so numerous as yet, but equally clear, decisive, and united in their testimony—have ari-

sen. Some of these, like Dr. Simpson, use it in every case,—others, mainly in the more difficult and protracted labors, or where manual or instrumental assistance is required. Dr. Miller, the much and justly esteemed Prof. of Obstetrics in our city University, has repeatedly used it in these latter circumstances, and always with the happiest results. Nay, so overwhelming now is the testimony in favor of the superinduction of anesthesia in many, if not in all cases of labor, that the "Committee on Obstetrics," in their late Report to the National Convention, actually propound the question, in all seriousness, "*Can anesthetics be rightfully withheld in midwifery?*

The opponents of the practice of etherization say, yes —and why?

The grounds of objection are numerous—medical, moral, social and *religious*. Our limits will not allow us to answer these at length, or even to glance at them. We must refer our readers to this collection of Dr. Simpson's essays on this interesting topic, for a complete refutation of everything which has thus far been urged against this practice. We bespeak for this volume a careful perusal, and for the whole subject of anesthesia in all its branches and in all its applications, a fair, candid and patient *trial*; —and such trial, we are sure, will not only end in its most honorable acquittal of all the charges that have been so hastily and groundlessly preferred against it, but will place in brighter light and clearer view its incalculable value.

We should be very careful how, on purely theoretical grounds, or hasty prejudices, or insufficient tests, we reject an agent which may be made subservient to the high purposes of humanity. A substantial fact is worth a thousand flimsy, finespun theories; and prejudices must yield finally to the light of reason, and, above all, to the teachings of experience. 'Tis now but a half century since the illustrious Jenner first made a public announce-

ment of his plan of stopping the ravages of the small pox. Public attention was called to the fact that from thirty to fifty thousand people died annually of that loathsome disease in England alone. A simple, safe and efficacious means of arresting its progress and stripping it of its terrors was offered to the world. In what spirit was it met? Societies and associations were formed to put down the "unholy practice of vaccination." The vaccination of the children of the poor was pronounced "a gross violation of religion, morality, law and humanity." It was accused of "poisoning the pure blood of British freemen, and entailing on them and their posterity, beastly diseases." Nay, of those who submitted to it, the women were said to "cough like cows," and the men to "bellow like bulls." The king was called on to prohibit the horrible practice; the parliament was petitioned to suppress it by actual legislation; the people were entreated to rise up in arms against the wretches who were engaged in this most atrocious villiany; the pulpit rang with denunciations of "impiety," "madness," "profanity;" and sabbath after sabbath, from every church and hillside in the land, resounded the most terrific anathemas pronounced on these "miscreants." But calmly and steadily they pursued the even tenor of their way, until now nine-tenths of all the civilized people on the globe are vaccinated. The mother now needs no urging from the physician—she imperiously demands protection for her infant. At the lowest calculation, *five hundred thousand fewer people* perish annually from small pox than there did fifty years ago—and it is not too much to hope that ere another century shall have rolled away this loathsome disease will be altogether exterminated.

Until about three hundred years ago, after amputations, (which were far more frequent then than now), or in cases of accidents, or under any circumstances where it was necessary to control a hemorrhage, surgeons universally had recourse to a red hot iron, or the potential cautery,

or boiling pitch, which were applied to the raw and bleeding wounds—producing tortures inconceivable and deaths innumerable. "The horrors of the patient, and his ungovernable cries," says the late Mr. John Bell, (*Principles of Surgery, vol.* 1, *p.* 212,) "the hurry of the operators and assistants, the sparkling of the heated irons, and the hissing of the blood against them, must have been terrible scenes; and surgery must, in those days, have been a horrible trade."

Ambrose Paré proposed a simple, safe, and, comparatively speaking, painless method of avoiding this shocking and dangerous practice, viz: the application of ligatures to the arteries. And how was *his* proposition met? "The College of Physicians of Paris attacked Paré for his proposed new practice. They attempted, by the authority of the French Parliament, to suppress the publication and dissemination of his observations; and, for nearly a long century afterwards, some of the hospital surgeons continued, with the characteristic obstinacy of the profession, to prefer cauterizing bleeding arteries 'with *all* the ancients,' rather than simply tie them 'after the manner of a few ignorant and presumptuous moderns!'"

These and other facts of like import, so abundant in the history of medical science, are fraught with warning and yet with encouragement. They warn us that new doctrines and new remedies are not to be despised and rejected because they are new; and at the same time they encourage us to hope that whenever a valuable, although novel, weapon is devised to combat our old enemy, all the opposition and reproach it may meet with, will be finally overthrown and trampled under foot. For who now does not resort to vaccination? Who would not hiss and deride the surgeon who would prefer boiling pitch to the ligature as a means of arresting hemorrhage? Whose names can the medical man point more proudly to, than those of Edward Jenner and Ambrose Paré?

R. J. B.

ART. VIII.—*The Maternal Management of Children in Health and Disease.* By THOMAS BULL, M. D., Member of the Royal College of Physicians, author of Hints to Mothers, etc. etc. First American from the Third London Edition. 8 vo. pp. 406. Philadelphia: Lindsay & Blackiston. 1849.

The above is the title of a work written by a London practitioner and addressed particularly to mothers.—With a large practice the author has had the best opportunities for forming a salutary code for the maternal management of children. And although we are unwilling to endorse all that he has written, still in the main he is correct and judicious. In the preface he says, "he wishes it to be distinctly remembered, that he has not written merely for those who are within reach of good medical and surgical advice, but for those also whose lot has been cast in uncivilized places, and where they are totally unable to obtain professional assistance." Hence his reason for entering into the minute details in which his book abounds.

The work is divided into two parts, the one entitled the Management of Children in Health, the other, the Management of Children in Disease. The first division contains many valuable precepts and practical suggestions touching maternal nursing, wet nursing, artificial feeding, the diet of childhood and the general management of infants and children. The second division, or the management of children in disease, is devoted to a consideration of accidents and diseases which may occur at birth and during infancy and childhood. Most of the diseases that belong to this period of life, with the remedies adapted to them are treated of, with comparatively a few unimportant exceptions, in a very pleasant, judicious and eminently practical manner. Space nor time do not, at present, allow us to make as extended a notice of the work as we wish. Before, however, taking leave of it

we will transfer to our pages the experience of Dr. Bull, as found in the chapter on *Rules for the Health of the Nursing Mother* concerning the influence of mental emotions upon the lacteal secretion.

A tranquil temper, and a happy, cheerful disposition, tend greatly to promote the production of healthy milk. Indeed there is no secretion of the human body that exhibits so quickly the injurious influence of the depressing emotions as that of the breast. And although we are not able at all times to detect by any agent we possess the changes which take place in its physical properties, so delicate an apparatus for testing its qualities is the digestive system of the infant, that it will sometimes instantly show that such changes have occurred by the serious symptoms which now and then arise. I might cite many instances that I have met with illustrative of this fact. In one case, the child had had repeated fits of convulsions from noon of the previous day; the parent had been suddenly summoned to her mother, attacked with apoplexy; anxious and excited, she gave the child the breast, and within half an hour the convulsions commenced;—other breast-milk was suggested and obtained, and the fits ceased; all the previous measures had been unsuccessful. In another instance convulsions occurred evidently from disorder of the breast-milk, but the source of derangement was not discovered until a few weeks after, when it appeared that on the morning of the day when the child was attacked, the mother was made acquainted with the deranged condition of her husband's affairs. *Fear* has a powerful influence on the secretion; first changing its properties, and then frequently stopping the secretion altogether. I was sent for to an infant between two and three months old in an attack of convulsions, so severe as to threaten a fatal termination. This child I had seen at the same time the day before sucking at the breast of its wet-nurse in perfect health, never having had a moment's illness. It had shown the first symptoms of indisposition the previous night after the nurse had retired to rest; when, having been at the breast, it became restless, crying frequently, evidently from pain. In the course of the night the bowels were violently purged; towards morning

the stomach would not retain the milk; and as the day advanced the general symptoms of uneasiness increased, and in the afternoon the convulsions above referred to came on. Upon inquiry I found the father of the young nurse had called on the previous evening, and not only violently abused his daughter, using severe and unwarrantable language, but had struck the poor girl, he being under the influence of liquor at the time. This interview produced such mental distress in the young woman as to attract the attention of her mistress, when an explanation of the cause ensued. Strict orders were given to forbid the man the house for the future: but the mischief was done; for it was too evident that the alarming state af the child had been produced by the deleterious change which had taken place in the nurse's milk. Remedial measures were used; the breast-milk withheld; and the infant, although it continued for many days in a doubtful state, eventually recovered: the young woman's milk, however, was altogether driven away, and another wet-nurse without delay was obliged to be obtained.

The author then cites that very remarkable instance of the effect of strong mental excitement on the secretion of the breast, mentioned by Dr. Von Ammon, which, although perhaps familiar to most of our readers, we will nevertheless quote.

"A carpenter fell into a quarrel with a soldier billeted in his house, and was set upon by the latter with his drawn sword. The wife of the carpenter at first trembled from fear and terror, and then suddenly threw herself furiously between the combatants, wrested the sword from the soldier's hand, broke it in pieces, and threw it away. During the tumult, some neighbors came in and separated the men. Whilst in this state of strong excitement, the mother took up her child from the cradle, where it lay playing, and in the most perfect health, never having had a moment's illness; she gave it the breast, and in so doing sealed its fate. In a few minutes the infant left off sucking, became restless, panted, and sank dead upon its mother's bosom. The physician who was called in found the child lying in the cradle as if asleep,

and with its features undisturbed; but all his resources were fruitless. It was irrecoverably gone." The milk in this striking case must have undergone a change, which gave it a powerful sedative action upon the susceptible nervous system of the infant. *A fretful temper* will lessen the quantity of milk, make it thin and serous, and cause it to disturb the child's bowels, producing fever and griping. *Fits of anger* produce a very irritating milk, followed by griping in the infant, with green stools. *Grief or anxiety of mind* often so diminish the secretion as to render other aid necessary for the sustenance of the child. *Fear* and *terror* would seem to produce a powerful sedative effect upon the milk, as proved in Von Ammon's case just quoted, and which in a minor degree I have noticed elsewhere. A knowledge of these facts ought to serve as a salutary warning to a mother not to indulge in, but carefully to guard against, either the exciting or depessing passions.

D. W. Y.

SELECTIONS

FROM

AMERICAN AND FOREIGN JOURNALS.

On Irregular Malarious Diseases, and their Counteractions by means of Strychnine.—By J. P. KIRTLAND, M. D. Prof. Phys. Diag. and Theo. and Prac, of Med., Cleveland Medical College.

Malaria has produced the larger share of fevers that have prevailed in Ohio. Those of a continued form, originating from other causes, have occasionally intercurred, and have not, in all instances, escaped the modifying influences of that agent.

All varieties and species of acute febrile disorders have varied in the quality of their action, in obeyance to the diathesis or epidemic constitution, which, during the last fifty years, has developed in this State, every grade, from the highest sthenic to the lowest asthenic.

Malaria has also induced many obscure and anomalous forms of disease, and frequently imparted new features and tendencies to every disorder that may come within the sphere of its influence.

To these irregular manifestations of its powers, and to certain means adapted to their counteraction, we would respectfully invite your attention.

That it makes its impressions, primarily, on the *cerebro spinal system*, can hardly admit of a doubt. A portion of that system is, as a consequence, impaired, which portion may be the base of an important nerve or nerves, distributed to various organs and structures. The morbid impression may be transmitted to the extremities of these

nerves, and there develop its evidences, in the form of some functional or organic derangement.

The viscera of the chest, abdomen and pelvis, and the fibrous cellular tissues may, in this way, become the seat of disease, from reflected malarious impressions. Such cases are common. Many affections of the heart, stomach, intestines and liver, and, in females, uterine disorders, are of this character.

They have been imperfectly recognized, and described by authors as "Irregular and masked intermittents," "Complications," &c. This exciting cause may restrict its action solely to the nervous system, and has been known to originate or complicate with every species embraced in Cullen's class "Neuroses," from Apoplexy down to Hysteria.

In other instances it may take a wider range, and show its effects under the forms of irritation, inflammation, and I might with propriety add, every disorder to which the human family is subject.

In all cases of malignant erysipelas, that have come within my experience, it has participated largely, either as an exciting or modifying cause.

To the western physician, under whose observation it is daily producing such effects, their diagnosis is often a source of perplexity; while to our eastern medical brethren, who know nothing of such diseases, except from books and lectures, it is a perfect stumbling block.

Nothing short of an intimate acquaintance, gained by experience and correct observation, can enable the practitioner to detect and comprehend the insidious and ever varying forms of malarious action.

They generally show some tendency to periodical attacks, but it may be so obscure and irregular as to escape the attention of a superficial observer. The circumstance of a patient having been exposed to this agent may occasionally aid in detecting the character.

If the *diagnosis* be correctly formed, the *prognosis* will, in most instances, be favorable.

On the other hand, if their intimate nature be overlooked, and attention directed merely to their more apparent symptoms, improper means will probably be prescribed that may induce more disorder than they will correct.

Even in cases that present a fair prospect of an ulti-

mate cure, it may not be possible to suddenly remove the malarious impressions from the nervous centres, especially if strengthened by time and habit. They are apt to remain for a long time, developing their effects without regard to weather, season and ordinary medication.

A frequent consequence is the expenditure of vitality and reduction of the system to a condition in which tuberculous matter will be deposited in the liver and lungs.

Prior to 1827 the only form of Phthisis known on the Connecticut Western Reserve, was of this secondary character.

The indications of cure, which naturally present themselves, are :

1. To *counteract* malarious action.

2. To *correct* any morbid change that may have occurred. Our remarks will be confined to the first indication.

Experience has demonstrated that under our present diathesis, in northern Ohio, *reducing* agents *used as such* are not appropriate means for curing these forms of malarious disease.

The lancet, emetics and cathartics, may occasionally be required *to change* the action, but not *to reduce* the system—a distinction, both correct and important, not always observed, either in practice or medical writings.

Specifics have not yet been found—bark and its preparations, even the valuable alkaloid, quinia, have all sometimes failed to effect a complete and permanent cure.

Capsicum, opium, preparations of iron, stramonium, wine, ale, brandy, hydriodate of potash, &c., have been frequently tried, singly and in different combinations, with only partial success.

Fowler's solution and tincture of opium, combined, have formed a favorite remedy with me, until recently.—With all these means of counteraction at command, the result of the treatment has not, as a whole, been satisfactory.

On attempting to effect a cure it would be philosophical to select agents that would determine their action to the original seat of disease. The woodman would not commence lopping off the extremities of the limbs for the purpose of falling the tree, but would direct his blows to the main trunk.

If the view we have taken of the original seat of mal-

arious impression be correct, it follows that the pathological condition we are required to treat, is an *impairment of the nervous centres, the evidences of which are exhibited in certain trains of symptoms of the nervous extremities.*

Our object would, of course, be to remove the morbid impression from whence those trains arise, and not direct our attention to the extremities where more symptoms are developed. The mode of accomplishing it is to excite in the nervous centres a new and artificial action, more compatible with a healthy condition than is the disease, and to carry it so far as to counteract and overcome the original morbid action.

Medication may then be withdrawn and health will resume her province.

On theoretical grounds we should look upon strychnine as well adapted to this purpose, as its powers are exerted principally on the cerebro-spinal system, when it excites an action of its own kind.

Experience has tested and established the correctness of this view. Some ten years since we prescribed it in many cases in the Commercial Hospital, at Cincinnati, with favorable results, except, from inattention on the part of those having immediate charge of the sick, the remedy was allowed to be given in too heavy doses, and it produced unpleasant factitious symptoms in a few cases.

We are, however, indebted to my colleague, Prof. Ackley, for its recent introduction into practice in northern Ohio, on more definite principles. It is now extensively employed by several intelligent physicians, and volumes of evidence in its favor might, if necessary, be laid before you.

Some cautions are required to regulate its use. If it be urged with too much rapidity, or continued beyond the point at which it begins to manifest evidence of its having established its control over the nervous system, factitious symptoms may arise that will either retard or defeat the cure.

Increase of sensibility and tenderness along the spine, particularly along the scapulæ, should warn us to withhold the remedy for a time. Carried beyond this point it will induce swelling, stiffness and rheumatic condition of the joints, severe neuralgic pains, spasms of the dia-

phragm, ringing in the ears, and general nervous irritability. It is necessary to allow its effects to entirely subside during the interval of its discontinuance. After one, two, or three weeks, the course may be repeated, and again, from time to time, as occasion may require. A failure to effect a cure by the first trial, should not discourage its repetition.

In many cases it may be relied on solely; in others it may be necessary to precede or accompany it with certain adjuvants, as mercurials and quinine. A combination with the latter will often prove more effective than either of the articles employed separately. To what extent it may be substituted for quinine, in the treatment of regular intermittents, remains to be decided by further experience. That it will answer the purpose in some cases, and fail in others, I have ample evidence.

A malarious action counteracted by it, is less liable to recur than when that purpose has been accomplished by quinine.

It is an important query, whether it may not be employed at a certain juncture in the forming stage of remittent fevers, and, perhaps, during the first part of the active stage, to counteract the malarious impression, and arrest its further progress. The subsequent symptoms that usually arise, are mostly the results of the impairment of the cerebro-spinal system, by such impression.

Many cases of our remittent fevers, as well as the malignant remittents of the south, have of late years been arrested at those stages, by means of a prompt use of quinine.

Much will depend on the form and mode in which strychnine is employed. In substance its effects are not always uniform and certain. The amorphous powders are impure, but the crystals are incapable of adulteration. The solution is the most preferable form for its use.

Through the kindness of Mr. Hall, of the firm of Fiske & Hall, an intelligent and experienced Druggist of Cleveland, I am enabled to lay before you the formula for "Hall's Solution of Strychnine."

℞ Strychnine crystals, xvi. grs.
Water.
Alcohol, aa ℥ vüss.
Acetic Acid.
Tinct. Cardamom comp. aa ℥ ss.
M. F. Sol.

Dose 20 to 30 drops, three times each day.

One drachm of the solution contains $\frac{1}{8}$ of a grain of strychnia. Adults will bear that amount for a dose, yet in ordinary cases it is better to make our approaches slowly, 1-32d to 1-16th part of a grain may be sufficient. Certain empirics are using it in doses of $\frac{1}{8}$ of a grain, and calling their practice "Homœopathic."

For the purpose of illustrating its powers and efficacy, permit me to state that I have been familiar with a case that originated from repeated exposures to malaria. It commenced with muco-enteritis, that at length terminated in dyspepsia, irregular and vitiated secretions from the liver, constipation, neuralgic pains in the bowels and limbs, and at 11 o'clock each day, a paroxysm of tic dolereux of the left supra orbita nerve, that was followed with an ichorous discharge into the nostrils from the sinuses of the affected side. Medication and circumstances would occasionally interrupt the violence of the disease, but it was never, during fourteen years, entirely absent.

Two years since the derangement of the liver and constipation became unmanageable, and resulted in a series of attacks of colic and peritoneal inflammation, and at last in a fully developed intermittent fever.

This latter phase was arrested by means of quinine, but the other prominent disorders continued. Last February the patient, in a reduced and suffering condition, was put upon the use of strychnine, *without any other medication whatever.*

At the end of four days evidences were apparent that the nervous centres were aroused, and their action transmitted to the nervous extremities. The liver began to pour out freely secretions of a healthy character, the appet te improved, the peristaltic motion became active, and lavements and cathartics were dispensed with, though for two years previous they had been in steady requirement.

The nervous pains and tic dolereux subsided, and at this time, perfect health is restored. Three different tri-

als with the strychnine were requisite to effect this important result.

During the exhibition of the first, the patient attempted to carry into practice the common maxim that "We cannot have too much of a good thing," and in the end demonstrated to his own satisfaction, *that we could have enough.*

Finding that his case daily improved under the use of 25 drop doses of the solution, he augmented them to 60 drops.

At length his limbs were attacked with severe neuralgic pains; the joints swelled; the spinal column became sensitive and painful upon the least motion; palpitation of the heart, ringing in the ears, and general nervous irritability, and occasional spasms of the muscles of the back, ensued before he relinquished his experiment. These symptoms gradually subsided, after the cause was withdrawn.

Time will not allow me to narrate an account of its favorable effects in one of the most obstinate forms of disease that we frequently meet at the west—constipation in sedentary and nervous individuals.

The true pathology is overlooked, and the organs of digestion generally charged with being in fault. Remedies are usually prescribed that in the end only aggravate the evil.

The origin of the disease is in the nervous centres, from whence its effects are reflected to the excito-motary nerves, which govern the outlets of the system.

In this section of the country, all such cases are either produced or modified by malaria.

The remedy is Strychnine.—*Proceedings of the Ohio Medical Convention.*

Observations on the Prevention of Severe Invasions of Scarlatina.—By THOMAS CARROLL, M. D., of Cincinnati.

To the Ohio Medical Convention:

Gentlemen: The subject upon which I propose addressing you is one that has for a long time engaged my attention. The conclusions at which I have arrived are

founded not upon ideal theory, as I believe, but upon the observations of facts which have not been confined within a narrow period, nor limited to a single locality. I think I have found them calculated to ameliorate much of the suffering produced by a most severe malady, and not unfrequently to aid in averting the hand of death from the sufferers. I therefore submit them to your consideration, in the hope that some of your body may be induced to put them to the test in their practice.

I first observed scarlatina during the year 1829. Between that period and 1832 I often witnessed it in various neighborhoods; and in some of these it was attended with great mortality. I had the misfortune, in the year 1831, to lose, by this disease, two patients in one family, within a few days; and some time during 1832 I lost two more, with the same affection, in another family. A third victim in one of these families was reserved for the hands of a steamer. These disasters sunk deep into my mind, and produced a train of thoughts, which led to the following conclusions:

That the attack of scarlatina might possibly be mitigated in its tendency to destroy life by preparing for its reception, by a strict course of dieting, and by a proper attention to the condition of the alimentary canal. I theredetermined that when I should again be called to treat a case of this disease in a family, which consisted of more individuals who might take the malady, to advise those to be subjected to a rigid course of dieting. That animal food should be prohibited, with the exception of milk —and that a mild cathartic should be administered to each individual, and be again repeated within the ensuing four or five days. After experience taught me that, where children were laboring under diarrhea, it was of great importance to effect a cure of it, if possible, before the invasion of the scarlatina.

This course I have pursued most undeviatingly ever since 1832, and I have, I believe, in all cases been able to persuade families to adopt it. The result has been that, since the time named, I have on no single occasion lost more than one case of scarlatina in a family during the continuance of any epidemic. Indeed, I do not now recollect that I have at any time lost more than one case in a family since that period.

The foregoing has been the result in my private practice; but at the Cincinnati Orphan Asylum my experience has been still further extended. In this institution I have met with the disease but once in an epidemic form, but on two or three occasions a very few sporadic cases have appeared. It very generally pervaded the inmates of the house in 1846, during the latter part of February, through March, and part of April. There were but about thirty children susceptible of the disease; of these one died. When the first case made its appearance, I directed a strict abstinence from animal food, and in two or three days a cathartic of one grain of calomel and ten of jalap was given to each inmate over two years of age, and half that amount to those under that age. But one set of purgatives was given; but the dieting was persevered in throughout, and I think with the happiest results; for all the cases, with the single exception mentioned, terminated favorably. Indeed, the disease was mild in nearly all the cases.

I am aware that cases may occur in which it would be improper to altogether withdraw animal food; and also that in some cases severe purging should be avoided, as in diarrheal cases where debility and anemia exist. Here it would be necessary to restrain diarrhea and remove debility. Indeed, in cases coming under these denominations, I have tried the plans mentioned with the happiest effects. Yet what can be done with the unhealthy can be best effected before the development of the specific affection, for all know how uncertain is the safety of a patient laboring under scarlatina, who has had it superadded to some chronic malady.

I am fully aware that a long succession of favorable results may occur where but little is due to any mode of medication. This may take place from the fact, that the disease very often appears in a mild form, and recovery is very general under any mode of treatment. But it must not be forgotten that I have been in the habit of pursuing the foregoing plan of preventing severe invasions of scarlatina during a period, now approaching twenty years; and whether in public or private practice it has but on one occasion disappointed me. I have now resided in Cincinnati more than eight years, and during more than seven years of this time I have been physician

to the Cincinnati Orphan Asylum; and have, notwithstanding, lost but four patients by this disease, including both my private and public practice. I do not know that my mode of treating this malady is better adapted to prevent mortality than that of my professional brethren, and therefore I attribute whatever of superior success I may have had to the preparation of the constitution, in the manner indicated, for the reception of the disease.—*Ibid.*

A new method of reducing dislocations of the elbow joint backwards. By M. MAISONNEUVE.—A case of dislocation of the elbow joint backwards, of some weeks standing, that had resisted the ordinary means of reduction, readily yielded to the following very rational and ingenious method:

The counter-extension strap, instead of passing under the arm pits, was fixed upon the arm itself, immediately below the insertion of the deltoid, the prominence of which served as the fulcrum.

Extension was performed by fixing the strap directly upon the olecranon, instead of the wrist; the two extremities, brought in front, were crossed upon the anterior face of the forearm, then carried behind and crossed a second time upon the posterior face of this part. The forearm was in this way embraced by a double circle in the form of a figure 8. A few moments of gradual and moderate traction were sufficient to return the displaced joint to its home.—*Gazette de Hôpitaux.*—D.W.Y.

Nitrate of Silver in the Treatment of Abscesses. By M. NONAT.—In abscesses, where it is desirable to prevent union of the parts, gentle cauterization of the edges of the wound with nitrate of silver in substance, repeated at intervals of one, two, or three days, is, in the opinion of M. Nonat, of the Cochin hospital, preferable to the use of pledgets of lint. It is more cleanly, less painful, not so likely to be followed by unpleasant consequences, and much easier of application than the lint.—*Ibid.*

The Cholera and other Prevalent Diseases.—[The following remarks on the mortality and the state of the public health in London, during the last winter, while cholera prevailed in that city as an epidemic were read before the Westminster Medical Society, April 7th, by Dr. Webster. They are interesting at the present time, when that disease is prevalent in so many portions of our own country. It is hoped that the question of the effect of cholera on the general mortality of the places where it prevails, will not be wholly neglected among us.]

Having adverted to the recent sanitary movement, which must in time produce beneficial consequences, Dr. Webster said, so far from the fears entertained by timid persons, that the public health would materially suffer by the re-appearance of epidemic cholera, the aggregate number of deaths from all causes had considerably diminished throughout London during the last six months, in comparison with the same period of the previous year, particularly in regard to diseases of the respiratory organs, usually so prevalent and fatal in cold weather. In proof of this opinion, notwithstanding the extraordinary severity of scarlatina and presence of cholera, the gross mortality from all diseases, in London, during the last six months ending the 31st of March, was 30,263; whereas, during the parallel six months of the previous winter, the total amount rose to 36,060 deaths, being an excess of 5797, or 18.82 per cent. in favor of the current season. The author observed that the greatest difference occurred in diseases of the organs of respiration; by which, including influenza, in the winter of 1847 and 1848, the deaths were 11,197; whilst during the same six months, ending the 21st of March of the current year, only 5127 persons died from the same causes; being less than half the former amount, or an excess of 118.39 per cent. more deaths under this head, in the previous, than the winter just terminated. Dr. Webster then alluded to some of the pectoral diseases, and said, that 1965 persons had died from pneumonia this season, but 3159 the previous, thus giving an excess of 60.76 per cent. By bronchitis, 2047 died the last six months, whilst the number was 2984 in the former period, being 45.77 per cent. more than now. Again, 3040 died from consumption this season, against 3740 in the winter of 1847 and 1848, being

nearly one quarter of the deaths greater from the same disease than recently. By influenza, only 78 deaths occurred, in place of 1739, registered during the former season. By measles, 391, instead of 1346, which thus caused two and a half times more deaths in the previous winter than the one just terminated. Scarlatina formed, however, a marked exception in respect of its virulence and mortality, having proved more fatal last winter than for many years; it was, in fact, the chief epidemic of the season; 2546 individuals, principally under 15 years of age, having died from that disease during the six months ending the 31st of March last, instead of 1362 during the parallel period of the previous year, although the mortality from the same cause was also then greater than ordinary. By typhus the deaths were fortunately less this year than last, 1585 having died from that cause during the present winter, in place of 2201 the previous, thus making an excess of 38.86 per hundred more in the last than in the present season. The author subsequently alluding to bowel complaints, remarked, contrary, perhaps, to expectation, that notwithstanding the existence of cholera, and the prevalent tendency to bowel complaints, diarrhea and dysentery had actually proved less fatal during the last six months than in the same period of the previous year. Thus, in the six months ending the 31st March, 1849, the deaths in London by diarrhea were 554, instead 644 in the same months of the year before. By dysentery, 135 then died, in place of 116 recently. This contrast is curious, seeing that cholera has prevailed more extensively than usual, by which epidemic malady, 984 persons died in London during the last six months; whereas, only 21 deaths are recorded in the previous winter. The author here observed that, great as the above amount of deaths by cholera may appear, it is not by any means so considerable as the mortality met with in the spring of 1832, when this malady also prevailed in London epidemically. For instance, in the month of March and the first week of April, of that year, as many persons died from cholera in the metropolis, during these five weeks, as throughout the entire six months ending the 31st March, 1849. Having now almost ceased to exist as an epidemic in London, as only four deaths had been recorded of cholera during the week terminating

last Saturday, Dr. Webster believed little apprehension need be now entertained, although likely, as in the year 1832, the disease may again become epidemic next summer, or in the autumn when cholera usually prevails in this country, but, for the most part, of a mild and less fatal description. From the various data detailed to the Society, notwithstanding the prevalence of cholera, and the unusual mortality by scarlatina, the author considered London had not become by any means unhealthy, nor had the last winter proved insalubrious. Dr. Webster subsequently discussed the diathesis generally exhibited by the diseases now passed under review. Speaking generally, from his own observation, as likewise from the information of other practitioners, the author believed that almost every complaint recently met with assumed an asthenic character—if not at first, at least soon afterwards, and even in those instances of disease which are really inflammatory, they very often soon exhibited symptoms of great debility and exhaustion—similar, in fact, to the peculiarity noticed when the influenza was so prevalent last year in the metropolis. Scarlatina, measles, and diseases of the respiratory organs, come all within this category, and have required very different modes of management to the measures formerly found beneficial. Dr. Webster then adverted generally to the remedies employed, and the methods of cure recently adopted, which, he said, were generally tonic and stimulating. Exceptions might occur to this rule, but they were rare, even in those diseases of the chest which formerly required antiphlogistic treatment. The abstraction of blood appeared seldom, if ever, necessary, and it is now as uncommon to bleed any patient as it was formerly the reverse. Indeed, the lancet, like the sword of the soldier in the time of peace, might be said to have been laid up in ordinary. The author subsequently discussed the treatment pursued in the several diseases alluded to in his paper, which it is unnecessary now to particularize, as the plans adopted seemed generally based upon the symptoms manifested, and the principles he had enunciated. In concluding the communication read to the Society, Dr. Webster observed, that although scarlatina was really one of the most prominent and serious epidemics prevalent during the last six months, whereby nearly three times as many persons were

nearly one quarter of the deaths greater from the same disease than recently. By influenza, only 78 deaths occurred, in place of 1739, registered during the former season. By measles, 391, instead of 1346, which thus caused two and a half times more deaths in the previous winter than the one just terminated. Scarlatina formed, however, a marked exception in respect of its virulence and mortality, having proved more fatal last winter than for many years; it was, in fact, the chief epidemic of the season; 2546 individuals, principally under 15 years of age, having died from that disease during the six months ending the 31st of March last, instead of 1362 during the parallel period of the previous year, although the mortality from the same cause was also then greater than ordinary. By typhus the deaths were fortunately less this year than last, 1585 having died from that cause during the present winter, in place of 2201 the previous, thus making an excess of 38.86 per hundred more in the last than in the present season. The author subsequently alluding to bowel complaints, remarked, contrary, perhaps, to expectation, that notwithstanding the existence of cholera, and the prevalent tendency to bowel complaints, diarrhea and dysentery had actually proved less fatal during the last six months than in the same period of the previous year. Thus, in the six months ending the 31st March, 1849, the deaths in London by diarrhea were 554, instead 644 in the same months of the year before. By dysentery, 135 then died, in place of 116 recently. This contrast is curious, seeing that cholera has prevailed more extensively than usual, by which epidemic malady, 984 persons died in London during the last six months; whereas, only 21 deaths are recorded in the previous winter. The author here observed that, great as the above amount of deaths by cholera may appear, it is not by any means so considerable as the mortality met with in the spring of 1832, when this malady also prevailed in London epidemically. For instance, in the month of March and the first week of April, of that year, as many persons died from cholera in the metropolis, during these five weeks, as throughout the entire six months ending the 31st March, 1849. Having now almost ceased to exist as an epidemic in London, as only four deaths had been recorded of cholera during the week terminating

last Saturday, Dr. Webster believed little apprehension need be now entertained, although likely, as in the year 1832, the disease may again become epidemic next summer, or in the autumn when cholera usually prevails in this country, but, for the most part, of a mild and less fatal description. From the various data detailed to the Society, notwithstanding the prevalence of cholera, and the unusual mortality by scarlatina, the author considered London had not become by any means unhealthy, nor had the last winter proved insalubrious. Dr. Webster subsequently discussed the diathesis generally exhibited by the diseases now passed under review. Speaking generally, from his own observation, as likewise from the information of other practitioners, the author believed that almost every complaint recently met with assumed an asthenic character—if not at first, at least soon afterwards, and even in those instances of disease which are really inflammatory, they very often soon exhibited symptoms of great debility and exhaustion—similar, in fact, to the peculiarity noticed when the influenza was so prevalent last year in the metropolis. Scarlatina, measles, and diseases of the respiratory organs, come all within this category, and have required very different modes of management to the measures formerly found beneficial. Dr. Webster then adverted generally to the remedies employed, and the methods of cure recently adopted, which, he said, were generally tonic and stimulating. Exceptions might occur to this rule, but they were rare, even in those diseases of the chest which formerly required antiphlogistic treatment. The abstraction of blood appeared seldom, if ever, necessary, and it is now as uncommon to bleed any patient as it was formerly the reverse. Indeed, the lancet, like the sword of the soldier in the time of peace, might be said to have been laid up in ordinary. The author subsequently discussed the treatment pursued in the several diseases alluded to in his paper, which it is unnecessary now to particularize, as the plans adopted seemed generally based upon the symptoms manifested, and the principles he had enunciated. In concluding the communication read to the Society, Dr. Webster observed, that although scarlatina was really one of the most prominent and serious epidemics prevalent during the last six months, whereby nearly three times as many persons were

carried off as by cholera, still the latter malady occupied by far the most public attention. With respect, however, to the management of scarlatina, the author said it differed essentially from the method other practitioners like himself had formerly found it expedient to employ. In previous epidemics of this eruptive disease, it was frequently necessary to resort to antiphlogistic measures, low diet, active purging, and even to bloodletting, either from the arm, or by leeches. During the recent epidemic, so far from depletion being required, or admissible, it was often advisable to commence supporting the system very early in the complaint, to give tonics, ammonia, wine, and sometimes even brandy, where the symptoms, apparently but not actually, seemed inflammatory, debility, depression, and a great want of tone in the system, being generally characteristic of the malady, whilst the remedies best adapted under such circumstances were of the above description. Fortunately, this severe complaint has recently considerably abated in virulence; and although still above the average of previous seasons, the consequent mortality is by no means now so great as it was about the latter part of last year, and the early portion of the current. However, at whatever period the present epidemic scarlatina may terminate, medical practitioners will not fail to remember its late great prevalence, rapid progress, marked symptoms of debility, and its unusually fatal character, as, likewise, the tonic stimulating plan of treatment which the disease almost invariably required.—*London Lancet.*

Inhalation of Nitrate of Silver, &c. *By* THOMAS K. CHAMBERS, M. D., Fellow of the Royal College of Physicians.—While treating diseases in those parts of the mucous membranes which are sufficiently exposed to sight and touch for the immediate application of remedial agents, there are few to whom the wish has not occurred, that equal facilities were afforded of directly influencing the deeper-seated continuations of the same fabric. The powerful remedies which restore so quickly to a healthy state the conjunctiva and the fauces, would probably act with equal rapidity and success on the stomach and bron-

chi, could we apply them rightly to the right spot, and attack the local disease without passing circuitously through the whole system. A mode I have lately adopted of attaining this end with the most inaccessible mucous surface of all, the pulmonary, though it is clumsy and imperfect, may still be found useful in some obstinate cases, where the upper part of the air-tubes is the principal seat of disease.

The plan consists in the inhalation of a light innocuous powder, which may carry with it the required substance, either diffused in the air or absorbed in its pores. That which I have found well suited to the purpose is the pollen of the lycopodium or club-moss, which has been allowed to imbibe as much as it would take up of a saturated solution of nitrate of siiver, or of sulphate of copper, or the two combined, and then carefully dried, and reduced again to an impalpable powder. Mr. Squire has made me some which, in two grains and a half, contains one grain of nitrate of silver, and another which in five grains contains one of nitrate of silver and two of sulphate of copper. The patient should introduce into his mouth, as far as he can without choking, a well-dried glass funnel, and draw in his breath strongly, whilst he himself, or a second party, dusts the powder in a dense cloud into the large end with an ordinary nursery puff-ball. If the dust is raised by an attendant, the patient can indicate the moment he inspires by raising his hand.

To obviate the necessity for withdrawing the funnel after each inhalation, to prevent the dust being blown about the room, an apparatus with a double valve and a closed powder-box may be used, which allows the dust to pass inwards only; but the necessary employment of metal makes the machine less agreeable than the more awkward but cleaner-looking and less formidable glass.

There is usually a slight degree of coughing excited by the dusty vehicle, but not of such moment as to prevent an immediate repetition of the experiment. This is certainly an inconvenience, but it seems a much smaller one than that which attends the introduction of a sponge into the larynx, as has been recommended. The spasm excited by this is distressing to the operator and painful to the patient, and prevents its employment in slighter cases, where the remedy appears to both as bad as the

disease. Moreover, the operation is a very dufficult one, requiring a rapid accuracy, a spirited tenderness of touch, as artists call it, which is the lot of few, and is seldom retained at that period of life when the intellect is most matured, but when the brush, the burin, and the scalpel, are handled with more judgment indeed, but with less elegance and delicacy.—*London Medical Gazette.*

New Method of Treating Urethral Pains following Gonorrhea.—M. Vidal (de Cassis) having frequently remarked that these pains were relieved by pressing the penis with the fingers, has been led to try compression for their treatment, and has found it useful, affording a perfect cure in many cases, and a marked alleviation in others. The operative procedure, says M. Vidal, is so simple that it is scarcely necessary to mention it. "The surgeon takes a long strip of diachylon plaster, one centimeter (two-fifths of an inch) in breadth, and rolls it around the penis in the same manner as a common bandage, beginning at the glans; or, still better, he may apply it more accurately by using a number of small strips of plaster, each of which shall only be sufficient to encircle the organ once, and the two extremities of each strip should be made to cross upon the urethra, for the purpose of insuring the firmness of the dressing. The principal point to be attended to is the degree of compression, which ought to be as firm as possible, without interfering with micturition, which would, of course, necessitate the removal of the dressings. The compression should be continued for a considerable period after the cessation of the pains, to prevent their return." M. Vidal cites two cases, from amongst great numbers which he has treated, in favor of this mode of practice.—*Monthly Retrospect*, from *L'Union Médicale.*

On Vinum Sem. Colchici Opiate in Gonorrhea. By Dr. Froinus.—Dr. Eisenmann, in a communication to the "Wochenschrift," in 1847, demonstrated the great utility of the Vin. sem. colch. (V. s. c. ℥iij.; tr. opii, ℈½), in

doses of from 25 to 30 drops three or four times a day, in the treatment of both male and female gonorrhea.—Without denying that it may be sometimes desirable to precede its use by purgatives or oleaginous fluids, he had himself found it applicable in all stages of the disease, effecting a cure, upon an average, in about seven days. In the present paper, 10 additional cases are related of its successful employment in various stages of the affection: and reference made to some 50 others, in which it proved as satisfactory in the results. It is not only useful in infectious gonorrhea, but in discharges from the mucous membranes from other causes.—*Ohio Med. and Surgical Journal*, from *Casper's Wochenschrift.*

Collodion in Chilblains.—In chilblains I have used it with the most decided success. In one case the patient had her feet for some time exposed to severe cold, which produced an erythematous inflammation of several of the small toes. They were swollen, red, tender, and itching. I completely enveloped them in a thick coating of collodion, and the contraction which took place on its drying produced so much compression of the vessels, that the toes were as pallid as frozen ones. The pain and itching were immediately relieved, and in twenty-four hours these members were nearly well. I have cured pernio of the heel, also, with this article, but I do not believe it a panacea for all cases of chilblain, even in its erythematous stage.—Dr. C. Green, in *Buffalo Medical Journal.*

A New Physiological Fact. (Revue Medico-Chirurg. de Paris.)—M. Magendie announced to the Academy of Sciences on the 2d April, that M. Bernard had detected that if a pointed instrument was made to prick the fourth ventricle, a little above the origin of the eighth pair of nerves, the urine of the animal wounded, which was before troubled, alkaline and deprived of saccharine matter, became abundant, clear, acid, and holding in solution a great quantity of sugar like that of the diabetic. An hour and a half to two hours would be sufficient to pro-

duce these changes. The blood also contains much saccharine matter. The experiment was repeated upon 16 rabbits, and exhibits a singular influence of the nervous system upon nutrition.

Death from a Drop of Laudanum. By H. V. Wooten, M. D., of Lowndesboro', Alabama.

A fine, healthy, female child, in the 5th day of its age, suffered from "griping," as its mother supposed, for which she administered to it *one drop* of laudanum.—Thirty minutes afterwards, its breathing becoming slow and stertorous, I was sent for; but being absent, another physician saw it, who found it impossible to get the child to swallow any thing. External excitants, &c., were resorted to, and three hours after the laudanum was taken I saw it. Its pupils were dilated and insensible to light, breathing very laborious, each inspiration giving a loud struggling sound, great lividity of complexion, &c. It would draw four inspirations, at the rate of sixteen per minute, and then cease to inhale about thirty seconds, when the four inspirations would again be drawn. On the fourth inspiration, a general spasm of the extremities would seize it. Its pulse during the last two inspirations was about 50 to the minute, during the spasm and suspension of breathing it would run up to about 100, become very weak, and finally cease at the wrists about six seconds before the breathing was resumed.

This condition continued without material variation until the sixth hour, when on bathing it in hot water and brandy, followed by the application of plasters of cayenne to the feet and hands, it breathed, continuously, but with great difficulty, at the rate of 30 inspirations to the minute, for 20 minutes, and its pulse during all this time ranged from 90 to 100. Its pupils contracted a little, and the lividity of complexion disappeared to a considerable extent. Hopes were now entertained that it had passed the crisis, and would recover; but spasms again seized it, from which it fell into a collapse, from which nothing that we could do would raise it. After this it would draw only three inspirations at the rate of twelve to the minute, when spasms would occur, and the suspen-

sions of breathing become longer. At the 10th hour, it drew but two inspirations together about twelve seconds apart, and then suspend for nearly a minute. For three hours, I thought during every suspension of breathing that it was dead, as its pulse would cease at the wrists before breathing was resumed; but it continued to labor for breath in this way until the end of the 11th hour when it died.

The laudanum was dropped from an ounce vial, in which there was about ten drops. It had been stopped with a piece of twisted paper, and hanging up about a year; all the inner surface of the lower part of the vial was encrusted with opium, and the remaining laudanum was heavily charged with this deposit resulting from evaporation. Every means of keeping the child alive which our ingenuity could suggest, were diligently applied, and with apparent effect, but not success.

This case is one which rarely occurs, and I report it mainly on that account; yet it is not otherwise destitute of interest. The stomach pump was not used, because I had no tube of suitable size, and besides, I was satisfied that it was too late to resort to measures of that kind when I saw it.—*Southern Med. and Sur. Journal.*

On the Treatment of West India Remittents and Intermittents by Quinine. By Dr. D. Blair, Demarara.

When quinine is taken by an adult to the extent of thirty or forty grains, it produces certain cerebral symptoms, the constituents of which are a ringing noise in the ears, and more or less deafness. This set of symptoms, where there is no idiosyncrasy, indicates the saturation of the system by the medicine, as ptyalism does mercury, and may be conveniently known by the name of *cinchonism*. Rare instances occur in which hyper-cinchonism is induced by a very few grains of quinine, accompanied by many nervous symptoms, and formication so severe as to proscribe the use of the remedy. In some—and this may occur in cases which had hitherto been normal—cinchonism has not been induced till after the administration of seventy-two grains of quinine. Cinchonism is not peculiar to quinine: by other vegetable febrifuges, such as sal-

icine, angustura bark, and biberine, cinchonism can be induced, but not with the same certainty as by quinine, neither in the same uniform series of phenomena, neither with the same harmlessness. Cinchonism seldom lasts longer than twenty-four hours, except in some cases of anemia, in which the writer has known it continue upwards of a week. Quinine has been prescribed by the writer to patients of both sexes and all ages, and where ascertainable, almost invariably to cinchonism, during thirteen years, and probably to the extent of several thousand ounces of the sulphate; and during that time he has seen no case of danger from its effects, with the exception of three or four cases of imputed abortion. To many the muffled ears of cinchonism are not even disagreeable. Cinchonism is capable of superseding and suppressing that excited condition of the circulation and animal heat known as fever, except when depending on anemia, as symptomatic of inflammation, or its effects.

Quinine is purely a febrifuge: instead of being a tonic or stomachic, it generally induces anorexia, and a relaxed and macerated state of the skin, some tremulousness, and in many cases slight aphonia. As a febrifuge the full efficacy of quinine is seldom obtained, unless pushed to cinchonism. Cinchonism is therefore the test and criterion in practice of the full and sufficient use of quinine. It is probable that the protective influence of quinine against fever seldom lasts longer than the manifestation of cinchonism. The ordinary headache of fever does not contra-indicate the use of quinine. The power of quinine seems to be to cut off the connexion between the local irritation and constitutional excitement, to disturb and break the series of morbid elaborations set up in some specific fevers, which terminate for the most part, in contamination of the blood and loss of vital cohesion of the capillaries. In intermittent fever it is antidotal. Quinine is of little efficacy in intermittent fever, when exhibited during the paroxysm. Quinine is of no efficacy in the last stage of continued or remittent fever, where the vascular and thermal excitement have been succeeded by organic lesion or contamination of the blood. It should be given, as is well known, in the intermission of intermittent fever, and the formation or in the first stage of continued remittent or yellow fever. The use of quinine

against relapses of intermittent fever, whether the disease has been primary or secondary, is one of the most valuable applications. In using quinine against the paroxysms of intermittent fever, hourly doses of three grains till twelve doses be given, is the best mode of saturating the system with the remedy. If, however, the disease be a quotidian, with short intermission, six grain doses hourly, till six doses be given, will be judicious practice.

In the other fevers where quinine is eligible, and the remedy is prescribed during the existence of febrile excitement, the dose, to be efficacious, must be large, and the impression on the disease sudden and overwhelming. An auxiliary, too, is also required in such cases: twenty-four grains of quinine and twenty grains of calomel, in one dose, is the most powerful resolvent of fever. One or two such doses, with an interval of six hours, and followed by a castor oil purgative, are generally sufficient; but I have prescribed six such doses with efficacy, and I recollect no instance of ptyalism occurring when this treatment was required and adopted, and sometimes there is but mild cinchonism. An intolerance of quinine, or early and intense cinchonism, in such cases, is one of the worst prognostics.

In the treatment of simple intermittent fever, or its relapses, calomel is rarely, if ever, prescribed by the writer. Sulphate and carbonate of magnesia mixture, or sulphate of magnesia and tartrate of antimony mixture, as a purgative during the hot stage, or fifteen drops of solution of acetate of morphine, with a drachm of sweet spirits of nitre, if there is much suffering from muscular pains, headache, or emesis and retching, will speedily remove the paroxysm; and followed by quinine, in combination with purgative doses of rhubarb, will fulfil all the indications for the intermission.

But when an European or North American, probably not long from a cold climate, and during the prevalence of malignant disease, is attacked by fever, and shows to the quick and practiced eye alarming indications, no fear of the injurious after-effects of the mercurial will have weight to withhold the resolvent dose of calomel and quinine. In cases threatening danger to life only need it be used, and I know of no instance wherein the slightest untoward result has been experienced from its use.

The combination of quinine with tartar-emetic, in pneumonic and bronchitic complications of intermittent, is eminently successful. The forces which disturb the remedial power of quinine in fever are chiefly inflammatory and congestive complications, or a loaded condition of the alimentary canal. These must be obviated by appropriate treatment, and the disease rendered as simple or idiopathic as possible, concurrent with the use of quinine. Thus arteriotomy may frequently be required in continued, remittent, or yellow fever; and in intermittent, with tenderness over spleen, a blister may be required, as an auxiliary to cinchonism.

There is a form of continued, or irregular remittent fever, occurring chiefly in children or adolescents, in which generally no local cause can be discovered, but which is often imputed to worms; but give what anthelmintics you will, no worms may be passed; hence here they are properly called "stubborn worms." This fever may continue for a week or a fortnight without any contamination of the blood or loss of vital cohesion, and probably depends on intestinal irritation. Danger in these cases chiefly arises from the supervention of some lesion, induced by the long-continued and excessive heat and violent action of the heart, or sympathetic irritation of the brain. In these cases I use quinine, with immediate and signal efficacy, in the following manner:

The patient is put into a bath, and the cold affusion is applied till the pulse becomes small and nearly extinct, at the wrist, and the skin cold. He then, while in the bath, gets his dose of quinine (two or three grains), and is returned to bed without being dried. The bath and the dose of quinine are continued hourly as long as the skin persists warm, when the hourly dose of quinine is due.—After five or six baths the skin generally becomes permanently cool, and then the quinine is pushed on to cinchonism, alone, and without the bath. This mode of making an intermission in a continued fever I have never found attended with unpleasant and dangerous consequences, and it will generally subdue the fever after every other method has been tried in vain.

In fever of doubtful origin, and where latent inflammation is expected, I have frequently used a small cantharides blister as a test; in fact, I never like to pass the blis-

tered surface of a patient without inspecting it, its revelations are often so interesting and important. If, instead of the usual vesication of thin serum and cuticle, the vesication is a bladder of fibrinous coagulum, or suety in consistence, inflammatory action is going on, probably in the neighborhood of the part, and tartar-emetic, or such like combinations, are indicated.

Relapses in intermittents have their determinate periods, the day from the last attack being generally some multiple of seven. The usual day of relapse among the acclimatized of this colony is the fourteenth or twenty-eighth. After one or two relapses, the law of each individual case can be ascertained by the patient. The prophylactic which I have adopted with great success, and in my own person first, many years ago, is as follows:—Two days before the anticipated relapse, three grains of quinine, to be taken thrice daily for four days; and after a similar relapse interval, the quinine to be again taken in the same manner; and so on, repeated three or four times successively. The disease is eradicated completely by thus baffling the relapse.—*Lancet*, from *N. O. Med. and Sur. Journal.*

Statistics of the Hospitals and the Medical Profession in Paris.—The administration of the Parisian hospitals employs 2500 individuals, and possesses a budget of from fifteen to sixteen million francs. There are fifteen hospitals, furnishing 7174 beds, and receiving 90,000 patients per annum. Besides these, there are four large hospices, and 7 retreats for 8000 aged and infirm persons. More than 100,000 receive *secours á domicile;* and above 25,000 foundlings are provided for. The following are the names and number of beds of the various hospitals:

General Hospitals.		Special Hospitals.	
Hotel Dieu,	810	St. Louis,	825
St. Marguerite,	300	Du Midi,	300
La Pitié	621	De l'Ourcine,	300
La Charité	494	Enfans Trouvés	600
St. Antoine,	320	Maison d'Accouchment,	514
Necker,	329	Maison de Cliniques,	120
Cochin,	325	Maison d'Santé St.Denis,	150
Beaujon,	438		
Bon Secours,	324		
De La République,	600		

A year or two since, some of the Parisian medical journals, alarmed at the constant increase of the numbers of the profession, called aloud for some legislative means of repression. The number of qualified doctors of medicine steadily increased from 1090 in 1833, to 1442 in 1847 —added to which, there were, in this last year, 175 of the lower qualified practitioners, termed *officiers de santé*, giving 1617 legalized practitioners for little more than a million souls (including hospitals, garrison, and other unremunerating bodies); while in London we had, at the same period, but 2500 regular practitioners for our two millions. Moreover, the midwives are, in Paris, a numerous body (480 in 1847), absorbing much remunerative practice, which, in London, falls to the practitioner. Then, again, classes of persons there resort to hospitals, who here pay for their attendance. If the remaining patients had been equally divided among the 1617 regular practitioners, it was calculated that 150 per annum would fall to each,—the charge for visits being 5, 3, 2 francs or even less, and no bad debts being recoverable at the expiration of a year. One of the effects of the revolution has been to produce at least a considerable temporary diminution of the numbers. Thus, at the commencement of the present year, there were but 1389, instead of 1442 doctors; the whole number of qualified practitioners diminishing from 1617 to 1555, and that of midwives, from 480 in 1847, to 385. The pharmaciens are the only portion of the body-medical who have held their ground, their numbers being 345 in 1847, and 363 in 1849.

Mortality.—Of the 1423 doctors at the commencement of 1843, there died 37 during 1843-4; of the 1430 in 1845, there died 50 during 1845-6; and of the 1442 in 1847, there died 56 during 1847-8.—*Rev. Méd. Chir.*

THE WESTERN JOURNAL.

THIRD SERIES.—VOL. IV.—NO. II.

LOUISVILLE, AUGUST 1, 1849.

OHIO MEDICAL CONVENTION.

At the Convention of the Physicians of Ohio, held at Columbus, on the 5th of June, 1849, the following resolutions were adopted, having a bearing upon Medical Schools:

Resolved, That in the opinion of this Convention, it is inexpedient for the Medical Schools of Ohio, at this time, to lengthen the term of their sessions; but it should be strictly enjoined upon students to be present at the beginning, and to continue in attendance until the end of the session;

Which was amended by adding the following resolutions, by Dr. J. C. Norton:

Resolved, That the practice of admitting young men to graduate, by attending upon one course of lectures only, considering four years' practice as equivalent to attendance upon another, is unjust to our Medical Schools, and to the community, as it indirectly holds out inducements to young men to engage in the practice of medicine, without due qualifications.

Resolved, That the Professors of the Medical Schools in this State, be requested to confer together upon the subject, with a view of correcting this evil.

An attempt was made by the professors in the Botanical and Eclectic Medical Schools in Cincinnati, during the last session of the Ohio Legislature, to gain admission to the Commercial Hospital on equal terms with the professors in the Ohio Medical College. With great propriety the Senate rejected the proposition, and we are glad to find the Conven-

tion sustaining this wise and dignified action of the Legislature. The following resolutions were adopted on that subject:

Be it Resolved, by the Ohio State Medical Convention, now in session, That it is inexpedient to admit into the Commercial Hospital and Insane Asylum any other lecturers and practitioners than those now recognized by law as holding connection with that institution; as a different policy would directly embarrass its movements, disturb its harmony, and greatly lessen its usefulness.

Resolved, That the primary and most important object of the Hospital is to provide for, and administer to the necessities of the indigent and destitute, and but incidentally to add to the advantages of medical classes; and to the end that the humane and benevolent objects for which such institutions are established be fully realized, it is proper that they be held and maintained in a state of quietude and comfort, so far as the circumstances connected with the government can be made to effect it.

Resolved, That any other policy than that contemplated in the act of the Legislature establishing the said Commercial Hospital and Lunatic Asylum, would be subversive of the objects which dictated its establishment, and consequently subversive of any rights and privileges of those who, for many years, have borne the responsibilities, and performed the labors of said Commercial Hospital and Lunatic Asylum of Ohio, located at Cincinnati.

Resolved, That we recognize, in the acts of the last Legislature of Ohio upon this subject, evidence of that wisdom, humanity and justice, which originated and perfected the establishment of the institution.

A number of interesting papers were read to the Convention, some of which we have transferred to our pages.

CHOLERA—DR. BIRD AND HIS SULPHUR PILLS.

It appears that Dr. Bird is about to distinguish himself still further, in his much vaunted specific—sulphur.

His pills, it seems, have shown themselves a trifle too potent, having produced in a young lady, at Detroit, in addition to the arrest of the diarrhea, unmistakable narcotism—an effect hitherto, we believe, never attributed to sulphur.

The Detroit Free Press, for June 16, contains the following curious statement, by Dr. Z. Pitcher, respecting the Chicago Remedy:

"I was called," says Dr. P., "to see a young lady, quite indisposed, whose symptoms were so analogous to those produced by a full dose of opium or morphine, that the inquiry was at once made of her friends whether she had taken a narcotic in any form, within the last few hours.

Both by them and herself I was assured, that the only medicine she had taken in several days, was one of Dr. Bird's Chicago pills, the evening before, to arrest a diarrhea, which it had done very effectually.

"I am so strongly impressed with the idea that the symptoms of narcosis were occasioned by the pill, that I have obtained two others from the same source."

These last two, unfortunately for Dr. Bird and the sulphur, were submitted to A. R. Terry, M. D., who, upon chemical analysis, says he discovered *a notable portion of morphia,* or one of its salts! Dr. Terry, not satisfied with this, went still further, and "took," says he, "the pains to trace these pills, and have the strongest reasons to suppose—nay, I am sure—that they came from Dr. Bird, of Chicago, himself."

DEATH OF PROFESSOR BLANDIN.

By one of the late transatlantic steamers, intelligence has been received of the death of P. Frederick Blandin, M. D. Dr. Blandin, at the time of his death, occupied the chair of Operarive Surgery in the School of Medicine, at Paris, and was one of the lecturers on clinical surgery at the Hôtel Dieu Hospital. He died after a brief illness, with cholera, aged 50 years. There were few of the surgeons of the French capital better known in this country than Dr. Blandin. An estimable gentleman, an ornament to society, an able writer, a brilliant operator, and a successful teacher. His loss will be everywhere deeply felt by the members of the profession of which he was one of the brightest ornaments.

RICHMOND MEDICAL COLLEGE, VIRGINIA.

Dr. David Tucker, one of the editors of the Medical Examiner, has recently heen appointed Professor of the Practice of Medicine, in the above institution. Dr. Tucker is a gentleman of high professional worth and will doubtless fill the chair to which he has been called with distinguished ability and success.

PROGRESS OF CHOLERA.

Since the publication of our former number, the ravages of cholera in this country have been of an alarming character, and in meditating upon these fearful visitations, we feel that we cannot too strongly urge upon those who cultivate Medicine as a science, to institute the most rigid scrutiny into the habitudes of the Pestilence, so that it may no longer walk "in darkness" among the nations of the earth. The highest triumph of Medical Philosophy is in guarding the world from the visitations of Epidemic disease. In the midst of such a visitation, medical art is almost powerless; while approaching its acme, and until it begins to decline, therapeutics are almost futile. To the mind that narrowly observes facts, that gives each and every feature of a truth its exact bearing, and is not seduced from the path of philosophy by the fascinations of a theory, an epidemic is a fruitful source of instructive knowledge, and we beg of our readers, who may have such facilities, to treasure up facts and report them. In this way all may contribute to the advancement of professional knowledge, and to the safety of communities.

"Happy is he who knows the cause of things" was the sentiment of an eminent Latin writer, but in its application to the philosophy of medicine, it has a wider and broader signification than he gave it. In that application the community is blessed which has Physicians who know the cause of things and are able and willing to ward off a pestilence. We would not exchange the possession of such ability for all the ovations that ever awaited a conqueror, and the greenest laurel that ever encircled the brow of the victor.

From the bosom of nature springs the pestilence that desolates cities and country, and it is the province of mind to search into the mysterious agency and remove all doubts and speculations on the subject. We commend the whole subject to the attention of our readers, and assure them that, in the history of Epidemics, there is a field for exploration that cannot fail to enrich the minds of all who may carefully and prudently expend their energies in that direction.

At various periods of the world there have been many such pestilences as that of cholera, and, in our judgment, nothing can be plainer than the fact that nearly all of them were dependent upon a condition of things that were perfectly under the control of man, if he had set about the work properly. In the 14th and 15th centuries medical phi-

losophy was scarcely advanced enough to make out the correct etiology for such epidemics as "black death," "sweating sickness," "dancing plague," &c., but even in the midst of the dearth of medical philosophy that then prevailed we gather very important and valuable facts that are highly useful in studying the phenomena of epidemic cholera.

In undertaking a study of the cause of epidemic disease, the following sources of knowledge must be thoroughly explored—*Physical geography,*—a science that has been most shamefully neglected—Meteorology, which, unfortunately, is yet in comparative infancy,—Physiology, Hygiene, and Pathology. An intimate acquaintance with each of these subjects of human knowledge is indispensably necessary in building up a system of Etiology, that may commend itself to the faith of mankind, and that may be useful to them. Groundless hypothesis, false systems, and erroneous data are never useful to the world; truth is the only consoler, and conservator, and is worth all other things.

In utter want of such knowledge, numerous speculators have recently appeared in the newspapers, delivering their inane dreams in the most perfect *ex cathedræ* style. A wild and untenable notion, that absence of atmospheric electricity is the cause of cholera, has been gravely advanced, and has attracted some attentien. We give this as a specimen of the grievous errors in existence. In some cases, when and where cholera was prevailing, electrical experiments failed, and the conclusion was made, not only that there was always a deficiency of atmospheric electricity during the prevalence of cholera, but that this deficiency was capable of producing cholera. The truth of the first does not necessarily prove the truth of the last proposition, but both were affirmed with equal zeal. Notorious facts should have settled both statements as wild and bootless guesses. Prof. Olmstead, of Yale College, has given the speculation its quietus by a series of philosophical facts, and closes his remarks with the following truth: "The disposition to ascribe the production of the cholera to variations in the electrical state of the atmosphere is not in accordance with the cautious spirit of the inductive philosophy."

One fact alone is sufficient to destroy the hypothesis: a deficiency of atmospheric electricity could not possibly be found in one or two spots of a large town, yet cholera often attacks a very small portion of a town, while all the rest remains heathy.

Cholera springs from a cause that is perfectly manageable, and we must seek a control of it, in an intimate knowledge of its nature. In a

future number of the Journal, we intend to undertake an exploration of all the phenomena of malarial epidemics.

But we must take a hurried glance at the progress of cholera in the West. We shall confine our remarks to four western cities—Nashville, St. Louis, Cincinnati, and Louisville.

In Nashville, cholera commenced in January, after a flood tide of the Cumberland river, and was restricted almost entirely to the part of the city that had felt the influence of the water. There were but few cases in the winter; from the 1st of January to 1st of June, a period of six months, there were 210 deaths from cholera, while in June, the first summer month, the deaths from cholera amounted to 190—within 20 of the amount for the preceding six months.

In St. Louis, the ravages of cholera were almost beyond description. The meteorological phenomena, attendant upon its epidemic influence, were frequent rains and intense solar heat. These were frequently mentioned during the severest ravages of the disease. From the 2d of January to the 9th of July, 3,262 deaths from cholera are recorded, and from reliable information, we have no doubt that at least one-third of the deaths for several weeks were not registered. Burials were made in the Commons, and in private lots. Eight coffins were found in one pond.

Cincinnati has also suffered severely, and though we have no means of knowing the exact number of deaths in that city, we shall not err much in saying that the mortality there equalled that in St. Louis. The disease was confined at first to Texas ward and Mill creek, but it spread gradually to other parts. Heavy fogs at night enveloped the city, and malaria found in them a suitable vehicle for traveling. Neither St. Louis nor Cincinnati is well ventilated, and this violation of sanitary law, sufficiently accounts for much of the mortality. When malaria is rife, ventilation is a great protection from its noxious influence.

At a very early period in the spring, Louisville commenced her sanitary measures, and, thanks to the city authorities, and to the industrious and persevering efforts of the citizens, in the work of purification, she has passed the epidemic period almost unharmed. The Board of Health with abundant means of knowing, report 141 deaths by cholera; only about 100 of these were indigenous to Louisville, and not more than five or six persons, that were well known in the community, died. The rest were comparative strangers. These facts, occurring in a city of

fifty thousand persons, show the value of well devised and well used sanitary regulations.

In the treatment of the disease here, we have found most success in the plan suggested by Dr. Ayre of England. In the early stages of the disease, a large dose of laudanum, say from 60 to 100 gtt., with a mustard bath for the feet was usually sufficient. Where collapse was rapidly approaching, we resorted to two-grain doses of calomel, with one drop of laudanum, given every five minutes, until biliary secretion was restored. This course saved many who were rapidly sinking under other forms of treatment. For the sick stomach, we found dry cupping, and sometimes scarification eminently useful, but occasionally administered one drop of creosote, in a tea spoonful of water, every hour. Ice and iced drinks were always useful, in every case we saw them used.

We have only space now for this meagre outline, but enough is said to direct the intelligent practitioner in his line of duty.

MORTALITY IN CINCINNATI.

From the 16th of June to the 16th of July, a period of 31 days, the aggregate mortality in that city, from all diseases, was *three thousand six hundred and eighteen*, making, in round numbers, a daily average mortality for the time embraced, of *one hundred and seventeen.*

The weekly mortality for the whole of the above period, is as follows:

First three days, to June 18,	138
First week, to June 25,	568
Second week, to July 2,	940
Third week, to July 9,	1022
Fourth week, to July 16,	950
Total,	3,618

In Cincinnati, as elsewhere, the mortality from cholera and other diseases occurring coetaneously with it, has been greatest among the foreign population. This population in that city is nearly one-third of the whole number of its inhabitants, but almost three-fourths of the entire number of deaths is from this class of the population.

BOOKS RECEIVED.

Through Messrs. Beckwith & Morton we have received from Messrs. Ticknor & Co., Boston, Tardieu's Treatise on Epidemic Cholera. From Messrs. Lea & Blanchard, Philadelphia, the great English work on Anatomy by the Drs. Quain & Sharpey; and the work of Dr. Tyler Smith on Parturition and the Principles and Practice of Obstetrics.

We have only space now to speak of one of these works: we allude to *Tardieu's Treatise on Cholera*. The author has prepared an excellent monograph on Epidemic cholera, which, though defective in some important particulars, is one that may be studied by the medical practitioner with great advantage. The historical department is not as full as it should be, but its details are very interesting and instructive. In the review of the causes of the epidemic there is much useful information, and the full length portrait of the disease itself is of the highest value. We cannot give that cordial approbation to the treatment that we should like to bestow on every part of the labors of the author. The plan of medication, of which we have given an outline sketch under the head of Progress of Cholera, is the one that has most thoroughly won our confidence. We feel persuaded that modifications of that treatment, made to suit the age, sex, temperament and peculiar condition of each patient, will be found eminently satisfactory to all intelligent physicians. No sensible practitioner will follow a routine treatment, but will suit his means to each particular case.

We take pleasure in commending Tardieu's Treatise to the study of our readers, and for the correct pathology of the disease, and its philosophical treatment, we commend the papers of Dr. Ayre, published in the December, January and February numbers of the *London Lancet*.

Of the other books, enumerated above, we shall take occasion to make an extended notice in the next No. of the Journal.

CONTENTS

OF NO. II.

ORIGINAL COMMUNICATIONS.

ESSAYS AND CASES.

ART. I.—A Lecture on the Determinative Cause of Labor, delivered to his Class, in Lebanon, Tenn., by F. H. Gordon, M. D. - - - - - - 93

ART. II.—Three Cases of Puerperal Peritonitis. Reported by L. M. Lawrence, M. D., of Nashville, Tenn., Resident Pupil at the Bellevue Hospital, New York, - 100

ART. III.—A Case of Nephritis—Lumbo-Renal Abscess—Death—Postmortem Examination. By Dr. E. B. Haskins, of Clarksville, Tenn. - - 105

ART. IV.—Report of Cases. By B. I. RAPHAEL, M. D., one of the Attending Surgeons to the Louisville Marine Hospital, - - - - - - 110

ART. V.—A Case of Heart Disease. By D. W. Yandell, M. D., of Louisville, Kentucky, - - - 115

ART. VI.—A Case of Cholera, with Remarks. By R. L. SCRUGGS, M. D., of Germantown, Tenn. - 123

REVIEWS.

ART. VII.—Anesthesia, or the Employment of Chloroform and Ether in Surgery, Midwifery, etc. etc. By J. T. SIMPSON, M. D., F. R. S., E. Prof. Midwifery in the University of Edinburg, Physician Accoucheur to the Queen in Scotland, &c. &c. - - - - 129

ART. VIII.—The Maternal Management of Children in Health and Disease. By THOMAS BULL, M. D., Member of the Royal College of Physicians, Author of Hints to Mothers, etc. etc. - - - - - - 149

SELECTIONS FROM AMERICAN AND FOREIGN JOURNALS.

On Irregular Malarious Diseases, and their Counteractions by means of Strychnine. By J. P. Kirtland, M.D., Prof. Phys. Diag. and Theo. and Prac. of Med., Cleveland Medical College, - - - - - 153
Observations on the Prevention of Severe Invasions of Scarlatina. By Thomas Carroll, M. D., of Cincinnati, - 159
A New Method of Reducing Dislocations of the Elbow Joint backwards. By M. Maisonneuve, - - 162
Nitrate of Silver in the Treatment of Abscesses. By M. Nonat, 162
The Cholera and other Prevalent Diseases, - - 163
Inhalation of Nitrate of Silver, &c. By Thomas K. Chambers, M. D., Fellow of the Royal College of Physicians, - - - - - - - 166
New Method of Treating Urethral Pains following Gonorrhea, 168
On Vinum Sem. Colchici Opiate in Gonorrhea. By Dr. Froinus, - - - - - - - 168
Collodion in Chilblains, - - - - - - 169
A New Physiological Fact, - - - - - 169
Death from a Drop of Laudanum. By H. V. Wooten, M. D., of Lowndesboro', Alabama, - - - 170
On the Treatment of West India Remittents and Intermittents by Quinine. By Dr. D. Blair, Demarara, - - 171
Statistics of the Hospitals and the Medical Profession in Paris, 175

ORIGINAL INTELLIGENCE.

Ohio Medical Convention, - - - - 177
Cholera—Dr. Bird and his Sulphur Pills, - - - 178
Death of Prof. Blandin, - - - - - 179
Richmond Medical College, Virginia, - - - 179
Progress of Cholera, - - - - - 180
Mortality in Cincinnati. - - - - - - 183
Books Received, - - - - - - 184